BIOLOGY 434 – ORNITHOLOGY

COURSE SYLLABUS - Spring 2013

Jay Bogiatto, M.S., Faculty
Class Meeting: TR 8-Noon in Holt Hall 235
Office/Hours: Holt Hall 211 / TR 3-4P and by Appt.
Email: rbogiatto@csuchico.edu

REQUIRED MATERIALS:
Dissection Kit (See Omicron Coffee/Donut Table for the best kits)

RECOMMENDED MATERIALS:
Gill, F. B. Ornithology, 3rd Ed. (Text)
Field Notebook with waterproof cover and/or paper (e.g., Elan)
Separate Notebooks for Lecture and Lab
A Separate Field Journal

ASSIGNMENTS:
Midterm (Cumulative for Lecture, Lab, and Field) 80 Points
2 Lab Practical Exams (2nd is Cumulative) 160 Points
4 Lab Quizzes – Bird taxonomy/identification (Cumulative) 60 Points
Final Exam: Slides + Written (Both Cumulative) 120 Points
Museum Skins +/-
Research Project - Paper/Poster 80 Points

TOTAL 500 POINTS

GRADING*
A 90-100% C- 69
A- 89 D 59-68
B+ 88 F 58 and below
B 80-87
B- 79
C+ 78
C 70-77
COURSE POLICIES:

1.) There will be no make-up exams given during this course.

2.) Tardiness is unacceptable.

3.) Missed labs and field trips, without serious and/or compelling reasons (see CSUC Catalog), will result in a subjective adjustment to your course grade.

4.) **Missing the North Coast field trip**, without a serious and/or compelling reason, will result in the loss of a full letter grade in the course; attendance is considered mandatory. Also, students missing this trip for serious/compelling reasons will be required to complete a second research project.

   **North Coast Field Trip Fee:** $70/person (Please pay Bogiatto by Friday March 29th). Fees will be used to cover meals (Food Only) for the weekend; any “leftovers” (unlikely) will be used to help cover some of the gas expenses.

5.) iPhones, iPods, and any other such technology (except for my BirdPod) must be turned off at all times during the lecture, lab, and field components of this course. In addition, the use of laptop computers will be limited to note taking. Students choosing to use iPhones, etc., and also their laptops for purposes other than note taking will be asked to leave class.

6.) Smoking is not permitted at any time during this course.
## COURSE CALENDAR

<table>
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<td><strong>January</strong></td>
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| 29 | **Lecture**: Course Introduction / An Introduction to Birds  
**Lab**: Avian External Morphology |
| 31 | **Lecture**: Avian Paleontology (Origins) / An Introduction to Taxonomy and Systematics / Gross Avian Taxonomy  
**Lab**: **Avian Classification Lab I**: Order: Anseriformes (I) |
| **February** | | |
| 5 | **Field**: Rancho Llano Seco Unit of the North Central Valley Wildlife Management Area |
| 7 | **Field**: Sacramento National Wildlife Refuge |
| 12 | **Lecture**: An introduction to Bird Skin, Feathers, and Feather Types  
**Lab**: **Avian Classification Lab II**: Order: Anseriformes (II) / Feather Types |
| 14 | **Lecture**: An introduction to Feather Development, Plumages, Molts, and Feather Color I.  
**Lab**: **Avian Classification Lab III**: Orders: Galliformes and Gaviiformes |
19 **Field:** Feather River and Thermalito Afterbay

21 **Lecture:** Plumage Color II. / An introduction to Avian Flight  
**Lab:** Lab Quiz I / Avian Classification  
**Lab IV:** Orders: Podicipediformes, Phoenicopteriformes, Procellariiformes, Phaethontiformes, Ciconiiformes, Suliformes, and Pelecaniformes

26 **Lecture:** Avian Flight  
**Lab:** Avian Classification Lab V: Orders: Accipitriformes and Gruiformes

28 **Lecture:** Flight / Video: Avian Flight, etc.  
**Lab:** Avian Classification Lab VI: Order: Charadriiformes

March 5 **LAB PRACTICAL EXAM I @ 9A**

7 **Lecture:** Flightlessness  
**Lab:** Lab Quiz II / Pigeon Lab I: Pterylosis, muscles, and Gastrointestinal System

12 **Lecture:** An Introduction to the Field Research Project, Paper, and Poster Presentation * / Pass out Journal Article (s); (Discussion will be on April 2\textsuperscript{nd}).  
**Lab:** Pigeon Lab II: Circulatory, Respiratory, and Urogenital Systems
14 Lecture: MIDTERM EXAM
   Lab: MUSEUM TECHNIQUES LAB I:
        Data Collection / Demonstration

SPRING BREAK

26 Lab: MUSEUM TECHNIQUES LAB II

28 Lab: MUSEUM TECHNIQUES LAB III;
        Bird Skins are due by 5P tomorrow (Friday March 29th)

April

2 Lecture: Vertebrate Brain
   Discussion: Research Papers
   Lab: Osteological terminology / Avian
        Osteology – Articulated Skeletons

4 Discussion: Research Project Q & A
   Lab: Avian Osteology – Articulated and
        Disarticulated Skeletons

April 5th – 7th

NORTH COAST FIELD TRIP
   - 1p Friday Departure from CSUC
   - 7p Arrival at CSUC on Sunday

9 Lecture: Avian Brain / Senses / Pass out
         journal article(s) dealing with mating
         systems (Discussion will be on April
         23rd
         Lab: Internal Anatomy of Study Skin birds

11 Field: Chico Oxidation Ponds, etc.
Lecture: Species Concepts and Speciation
Lab: Avian Classification Lab VII:
Orders: Columbiformes, Cuculiformes, Strigiformes, and Caprimulgiformes

Field: Llano Seco Unit of the North Central Valley Wildlife Management Area / Howard Slough Unit of the UBBWA

Discussion: Journal Article(s)
Lecture: Avian Reproduction:
- Vertebrate Mating Systems
- Avian Mating Systems
Lab: Lab Quiz III / Avian Classification
Lab VIII: Orders: Apodiformes, Coraciiformes, and Piciformes

Lecture: Avian Reproduction:
- Annual Energy Cycle
- Courtship through Fledge
Lab: Avian Classification Lab IX:
Orders: Falconiformes, Psittaciformes, and Passeriformes (1)

Lecture (10A): Avian Reproduction:
- Courtship through Fledge
- Cooperative Breeding
- Brood Parasitism

May 2
Field: Chaparral and Western Montane Coniferous Forest
Lecture: The Amniotic Egg Development / Extraembryonic Membranes
Lab: Avian Classification Lab X: Passeriformes (II)

Lecture: Avian Parasites and Diseases
Lab: Lab Quiz IV / Avian Classification
Lab XI: Passeriformes (III).

Field: Sacramento River Riparian Forest / Rancho Llano Seco Unit of the North Central Valley Wildlife Management Area

LAB: LAB PRACTICAL EXAM II @ 9A

FINAL EXAM: Tuesday May 21st @ 10A in Holt 235

• Posters will be due at 8A on Friday May 17th, the day of the Department of Biological Sciences Poster Symposium. Students will be expected to (1): Host their posters at the symposium on Friday afternoon, and (2) Attend the Awards Ceremony at 4p in Holt Hall 170.

Also, research papers are due by 5P on Monday May 20th (Monday of Finals Week).