

## **Dakota College at Bottineau Course Syllabus**

Course Prefix/Number/Title:FWLD 243 - Ornithology

Course Description: An introduction to the biology, classification and identification of birds.

Course Objectives: A) To understand the taxonomy of bird orders and families and the evolutionary developments from earliest to modern species, B) To investigate the physiological processes of all avian types and modifications from one type to another, and C) Field identification of N.American birds.

Instructor: Kenneth C Cabarle

Office: Nelson Science Center 113

Office Hours: MWF 9:00-9:50

Phone: 701-228-5463

Email: kenneth.cabarle@dakotacollege.edu

Lecture/Lab Schedule: MWF 10:00-10:50/ Tue. 10:00-11:50

Textbook(s): *Ornithology* by Frank B. Gill

Field Guide: Field Guide to Birds of North America - Robbins

Course Requirements: 4 major exams each 100 pts.

Weekly quizzes each 20 pts.

4 Laboratory practical exams each 100 pts.

Grading Schedule:

90-100% = A

80-89% = B

70-79%= C

60-69% = D

<60% = F

#### Tentative Course Outline:

- A. The Diversity of Birds: Basic characteristics of birds. Bird names and classifications.
- B. Avian History: Evolution of feathers, avian flight, and mandible/feet.
- C. Form and Function: Feathers, flight, physiology, and feeding.
- D. Behavior and Communication: Brains/senses, visual communication, and vocal communication.
- E. Reproduction and Development: Reproduction, nests/incubation, mates, growth and development, and parental care.
- F. Population Dynamics and Conservation: Demography, population, species, communities and conservation of endangered species.
- G. Behavior and the Environment: Annual cycles of birds, migration, navigation, and social behavior.

This course is a study of the natural functions of reproduction and survival methods of birds.

#### Classroom Policies:

All students will respect the classroom environment that will allow for maximum interaction between students and the professor. All cell phones will be turned off when entering the classroom, unless an emergency call is anticipated.

#### Academic Integrity:

All students will do their own, original work on reports, laboratory assignments, and essays. Any student caught cheating on an exam or quiz will be reprimanded the first time. If it happens again, the student will drop the class.

#### Disabilities and Special Needs:

Please inform the professor within the first week of classes if any assistance is required due to disabilities or special needs.

## Syllabus for Ornithology

Biol 4433/5433: Spring 2010 Dr. Ray Matlack

<http://www.wtamu.edu/~rmatlack/bio4433.htm> ANS 333, 651-2583

[rmatlack@mail.wtamu.edu](mailto:rmatlack@mail.wtamu.edu)

**Meeting times: Lecture - TTh 9:00-9:50 (ANS 201); Lab – Wed 7:00-11:00 (ANS 310)**

**Office Hours: T, Th 8:00-9:00; W 11:00-12:00 and by Appointment.** I am happy to schedule an appointment to meet with you anytime I am available. You may schedule an appointment to meet with me via email or phone. I check my email and voice mail several times each day and will promptly reply to your messages.

**Text Book:** *Ornithology*, 3<sup>rd</sup> Ed., F. B. Gill, and \*National Geographic Field Guide to the Birds of North America

\*Other appropriate field guides may be substituted but select your guide with care. You will be allowed to use field guides on the field exams and choosing a poor guide will influence your performance. See me before you decide to substitute another guide.

**Course Content:** This course will examine the biology, ecology, diversity, behavior, and field identification of birds.

**Course Objectives:**

1. Examine the biology of birds with an emphasis on anatomy, reproduction and structures associated with flight and communication
2. Become familiar with the ecology and behavior of birds
3. Survey the diversity of birds
4. Become proficient at identifying, by sight and call, bird species common to the Panhandle
5. Learn to effectively use field guides and binoculars to identify birds in the field
6. Further your ability to think analytically and critically about information presented to you in class and in your readings
7. Practice interpreting graphs and understanding data sets

**Class Policies:**

**Attendance** - I cannot imagine that you will find it possible to master this material without regular class attendance in the lecture and the laboratory. Regardless of whether you are in class or not, you are responsible for everything which is discussed in lecture, any announcements made in class, everything that is assigned as class reading, and any handouts given out in class. If you miss class, you must make your own arrangements for access to class notes or handouts from classes that you miss. I will not provide copies of my class notes except under very rare circumstances (serious injury, surgery, etc.) and by PRIOR arrangement only.

## **Grading:**

### **Lecture:**

3 Exams (2 lecture exams and a final exam) 150 pts each 450 total  
Independent field observations (10 @ 10 points each) 100 pts

### **Lab:**

2 Lab Exams 100 pts each 200 pts

Winter bird field practical 50 pts

Photo ID quizzes up to 10 @ 10 pts each 100 pts

Call/song quizzes up to 5 @ 10 pts each 50 pts

Lab final (field practical and cumulative call/song test) 150 pts

\*Other Lab Assignments ? Up to 100 pts

\*Additional assignments will be given, as necessary, to facilitate learning of the material or to help meet the course objectives.

NOTE: Please be quiet and attentive during field trips. Large groups are detrimental to seeing a lot of birds so it is imperative that everyone be conscious of this and do their best to keep disturbances to a minimum. Avoid talking loudly, fast movements when birds are close, and pay attention to me so I can convey information to you in a quiet voice. Disruptive or inconsiderate behavior will not be tolerated. **Ten points will be deducted from your laboratory grade for disruptive behavior during field trips (for each offense!). If you continue to be disruptive you will not be allowed to participate in field trips.**

Lecture Exams: Lecture exams will cover all of the material discussed in my lectures and all assigned readings. The first lecture exam will also include material on the order of birds of the world that will be covered in the laboratory portion of the class.

Laboratory Exams: Lab exams will tend to be hands-on exams. **Lab exam 1** will focus on structures of the pigeon (more properly called a rock dove), the bird skeleton, and other material covered prior to lab exam 1. **Lab exam 2** will focus on species identification of study skins and other material covered since lab exam 1. The **winter bird field practical** will assess your ability to identify birds wintering in the panhandle (some of these will migrate out of the area before the lab final). Format of the winter bird field practical will follow that of the final lab exam. The **final lab exam** will consist of a field practical and you will be required to identify birds, by sight and sound, in the field. Additionally, you will be required to identify birdcalls played back in the lab (cumulative – you are responsible for all calls provided during the semester). You may use a field guide and any field notes for the field portion of this exam. You are not allowed to use the help of other students. Talking or other behavior that can be construed as cheating will not be tolerated and you will be assigned a 0 for any quiz or test.

### **Graduate students enrolled in Biol 5433:**

Graduate students are required to complete additional work (enrichment) in stacked classes. In Ornithology, each graduate student will be required to serve as editors for the independent field observations produced by the undergraduates in the course. As an editor, your responsibility will be to check the observations for correct common names, format, and completeness and to identify species

that may have been misidentified (e.g., species that do not occur in the area). Additionally, graduate students will be responsible for providing accurate species lists for the class following each class field trip.

Your class grade will be based on the percentage of the points you make out of the total number of points available (Class grade = (points made/total points available) x 100). Letter grades will be assigned using the grade scale presented below.

**Grade scale:** A= 90-100%

B= 80-89%

C= 70-79%

D= 60-69%

F= 0-59%

**Tentative Lecture Exam Dates:** Exam 1 9 February (includes all lecture material to this point and orders material from lab)

Exam 2 25 March

Final Exam (Exam 3) 6 May @ 8:00 am

**Makeup exams** – All exams must be taken at the times announced in class or in the syllabus. Make up exams will be given at the instructor's discretion unless the student has a doctor's letter or letter of absence for a school-sponsored event. If you have a serious reason for missing an exam, you must contact me **BEFORE** the scheduled exam period to notify me that you cannot take the exam. You are then responsible for arranging with me to make up the test or quiz **within two days** of your return to campus. **If you are late to an exam and students have completed their exam and left the classroom you have missed the exam.** If you miss a laboratory quiz or exam you may not be able to make up the assignment or you may be given a test or quiz that differs in format, number of questions, etc. from that given to the rest of the class on the assigned date.

Note: Exams are subject to change and I reserve the right to change any and all information contained in the syllabus.

**Academic dishonesty** - If you are uncertain about what constitutes academic dishonesty, please read the appropriate sections in the Code of Student Life. I will have zero tolerance for academic dishonesty. Instances of dishonesty will be punished to the fullest extent possible, including the receipt of a failing grade for the course. Take care to avoid the appearance of cheating! During exams keep your eyes on your own paper, keep books and bags closed, and put all paper away.

**Lecture content: Topics**

Characteristics of birds; naming and classification  
History of birds  
Feathers  
Flight  
Physiology  
Senses  
Vocalizations  
Annual cycles of birds  
Migration and navigation  
Social behavior  
Mates, mate choice and sexual selection  
Breeding systems  
Bird sex  
Nests and incubation  
Parents and their offspring  
Conservation

**Readings**

Ch1; Avian cognition and intelligence  
Ch 2  
Ch 4  
Ch 5  
Ch 6  
Ch 7  
Ch 8  
Ch 9  
Ch 10  
Ch 11  
Ch 12  
Ch 13  
Ch 14  
Ch 15  
Ch 16  
Ch 21