# Syllabus - BSCI238A: Ornithology

# DRAFT- modifications are expected for Fall 2019 course

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Advisor: Dr. Thomas Holtz, <a href="mailto:tholtz@umd.edu">tholtz@umd.edu</a>

Room: TBD

Office Hours by appointment, location TBD

This course serves as an introduction to the field of ornithology, including the identification, evolution, and ecology of birds, as well as the methods by which biologists study these topics. The application of lecture topics to personal observation in the field is central to the course. The course objective is to develop a working understanding of the following topics and skills:

- Bird identification and observation in the field
- Field ornithology techniques
- Bird anatomy and physiology
- Evolutionary biology of birds

# A Note on Student Initiated Courses (STICs)

This course is part of the <u>STICs</u> program, in which undergraduate student facilitators design and teach courses under the guidance of a faculty advisor. Under this model, Madison will teach the course, while Dr. Holtz will have administrative and advisory responsibility. Concerns about course material, grading, etc. should be directed to Madison.

### **Prerequisites and Academic Requirements**

BSCI160: Principles of Ecology and Evolution, or another evolutionary biology course with permission of the instructor. In particular, an understanding of evolution by natural selection is expected prior to taking the course. This course does not fulfill any General Education requirement, nor any BSCI or other major or minor requirement. It is an elective and will count toward the 120 credits required for UMD graduation.

## **Required Materials**

A pair of binoculars is required for bird observation, primarily during homework assignments. You are permitted and encouraged to choose among the many small, lightweight, and inexpensive binoculars out there. There is no textbook required for this course, although a field guide to birds in Maryland such as <u>Smithsonian Handbooks: Birds of North America, Eastern Region</u> is recommended. Please make sure that any field guide you choose covers birds of North America, preferably with a focus on the Eastern or Mid-Atlantic region. Field guides group similar birds together and are easy to reference in the field; however, if you so choose, the website <u>www.allaboutbirds.org</u> provides free species profiles that you can compare later with field notes.

# **Course Meeting**

This course meets once a week for 50 minutes. This meeting will include lecture with some opportunity for discussion of readings and bird observations with peers.

# Grading

Component	<u>Points</u>
Homework	110

Midterm Exam 75
Final Exam 75
Participation 40
Total 300

A letter grade will be assigned based points earned, as follows: A = 270-300 points; B = 240-270 points; C = 210-250 points; D = 180-210 points; C = 180-210 points;

Grades will not be rounded if they do not reach these ranges.

Assignment	Due Date	Number of Points
Observation Assignment #1	09/09	10
ELMS ID Practice	09/16	10
Observation Assignment #2	09/23	10
Observation Assignment #3	09/30	10
Observation Assignment #4	10/07	10
Red Knot and Horseshoe Crab Reading	10/14	10
Midterm Exam	10/21	75
Observation Assignment #5	10/28	10
Observation Assignment #6	11/04	10
Onezoom.org Assignment	11/11	10
Observation Assignment #7	11/18	10
Birds of Paradise Reading	11/25	10
Observation Assignment #8	12/02	10
Whooping Crane Reading	12/09	10
Final Exam	12/14	75
Participation		40

<sup>\*</sup>Note that the lowest two grades of the 10-point homework assignments listed above are dropped.

### Homework

All homework is to be submitted through ELMS the night before class (i.e. at 11:59pm). Homework will be posted to ELMS no later than day of the lecture that it is assigned. It will consist primarily of Observation Assignments, which are described below, as well as some readings. The readings will be accompanied by a short quiz on ELMS intended to test comprehension and will typically be followed by a brief discussion with peers in class. The lowest two homework grades will be dropped and will not count towards your final grade in the course. However, the content from a homework assignment that you did not complete may still appear on an exam. Homework assignments are graded out of 10 points, for a maximum 110 points possible from 13 assignments with the lowest two dropped.

# **Observation Assignments**

Most homework takes the form of observation assignments, which are intended for students to practice bird identification and observation. Students are expected to find a bird using the required binoculars, and record notes on its appearance, behavior, vocalizations, etc. These birds can be around campus, home, parks, or wherever else, but they must be wild birds (no pets or domestic fowl). You are welcome to complete these assignments at any time of day, but bear in mind that birds are most active in the early morning and very few are active in the evening and night. Plan accordingly to meet the deadline.

Assignments will be graded on a 10-point scale based on thoroughness and comprehensiveness of the notes. A *legible* scan or photograph of the field notes uploaded to the ELMS assignment page is acceptable, or the notes can be typed after the observations. These assignments should take no more than 30 minutes, but you should be as thorough as possible in your notes. Please see the ELMS files for more comprehensive examples and guidelines.

#### **Exams**

There will be one midterm and one final exam for this course. The midterm is to be held on October 21 and will cover material from the first half of the course. The final exam is to be held on December 14 and will cover material from the entire course, with emphasis on the second half. Only students with absences excused by University policy will be eligible to take a makeup exam. For religious observances or other excused absences that you know about ahead of time, you must contact me within the first two weeks of the semester, or as soon as possible. For unexpected circumstances that result in absence from an exam, you must email me as soon as you know that you will be absent from the exam, and present documentation of the reason for the absence during the following class period.

# **Participation and Discussion**

Attendance at lectures is strongly encouraged. Points for the participation grade, which is 40 points of your final grade, can only be earned by attending lecture. You may present a self-signed note for one excused absence due to illness, and documentation for additional excused absences, which will not affect the participation grade. Please see the Academic Integrity and Course Policies section for additional information on absences.

Within many of the lectures, there will be opportunity to discuss readings and bird observations with classmates. The aim of the class discussions will primarily be to draw connections between observations and course material. The participation grade will come partly from attending class and refraining from cell phone use and other violations of Course Policies. You are also expected to contribute in class discussions by sharing ideas and/or asking questions, and by listening to peers. You will receive participation grades out of 10 points at four times during the semester, following the 09/23, 10/21, 11/18, and 12/09 course meetings, that reflect your participation in the corresponding quarter of the semester. This structure is intended to provide early feedback on participation, so that you can adjust well before the semester's end if you wish to do so.

# **Academic Integrity and Course Policies**

Please review this page for information about University policies relating to academic integrity, grades, non-discrimination, and other topics. It is your responsibility to understand and comply with these policies. All work on exams, homework, and other assignments must be completed individually. In particular, please note that any report of a bird observation that you did not make is fabrication and will be reported to the Honor Council.

In accordance with University policy, you may present a self-signed note for <u>one</u> absence due to illness, as long as it does not coincide with an exam. For excused absences that you know about in advance, such as religious observances, you must inform me by email during the first two weeks of classes. For other excused absences, please inform me by email in advance or as soon as possible, and provide documentation in accordance with the University policy linked above. Notification and documentation of an excused absence are required in order to arrange a makeup exam.

If you require Accessibility and Disability Service (ADS) accommodations, please email me to make an appointment to discuss them early in the semester, or as soon as you know you can receive accommodations.

Studies show that handwriting notes on paper promotes learning better than typing them out. Therefore, you are strongly advised to use a notebook and pen to take notes during lecture. At times, it may be helpful to view assigned reading or other resources on a computer; however, if this becomes a distraction, I may ask you to put away your device. If you do choose to use a laptop or tablet during lecture, please use it only for notes. You should not be doing homework for this class or other classes during lecture. Cell phones should be off and put away during class.

No late homework assignments will be accepted, although the two lowest homework grades will not count towards your final grade in the course.

#### Contact

Please direct all communication to the course facilitator, Madison Plunkert, via either Canvas messages or emailing <a href="mailto:mplunker@terpmail.umd.edu">mplunker@terpmail.umd.edu</a>. (Please note that although my last name ends with a T, my UMD email does not.) Monitor ELMS announcements for important course information. In the event of a University cancellation, check ELMS for communications from me about covering the day's materials.

#### Resources

The site <a href="www.ebird.org">www.ebird.org</a> includes maps where you can find "hotspots," which are public birding locations that other birders have visited. There are some on and near campus where you may want to start your observations. eBird also shows you which species other birders have recently observed, so you can get a handle on what to expect in the field.

The site <u>www.allaboutbirds.org</u> includes species profiles, range maps, and useful visuals for topics like anatomy and feather morphology. Both websites are managed by the Cornell Lab of Ornithology.

## **Course Schedule**

This schedule is subject to change. All changes will be announced in class or via ELMS.

Week	Date	Lecture	Assignments Due
1	08/26	Syllabus; Observation Skills	None
2	09/09	Identification	Observation Assignment #1
3	09/16	Techniques in Field Biology	ELMS ID Practice
4	09/23	Anatomy	Observation Assignment #2
5	09/30	Vocalizations	Observation Assignment #3
6	10/07	Feathers and Flight	Observation Assignment #4
7	10/14	Migration	Red Knots and Horseshoe Crabs
			Reading – select sections
8	10/21	Midterm Exam	None
9	10/28	Bird Communities	Observation Assignment #5
10	11/04	Evolution: Origins of Birds	Observation Assignment #6
11	11/11	Evolution: Tree of Birds	Onezoom.org Assignment
12	11/18	Food and Foraging	Observation Assignment #7

13	11/25	Breeding: Courtship and Sexual	Birds of Paradise Reading
		Dimorphism	
14	12/02	Breeding: Nests and Young	Observation Assignment #8
15	12/09	Conservation	Whooping Crane Reading