

## **Course Syllabus:**

### **Special Topics in Biology - Avian Life History BIOL 830P-02, 3 credits Spring 2023**

#### **Instructor:**

Dr. Letitia Reichart  
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**NOTE:** Email is my preferred method of contact if you inquire about a personal issue. General questions about the course can be posted on the Frequently Asked Questions Discussion Board on Canvas.

**Office Hours:** TBA or Email to arrange a time for a phone discussion or Zoom meeting

**Course Description:** Topics are studied which are not assigned or covered in other courses in the department. The format of this course will vary depending on the topic of instruction and the needs of students. Topics in Botany Topics in Fresh Water Biology Topics in Vertebrate Biology Topics in Invertebrate Biology Topics in Nebraska Flora Topics in Physiology

**Specific Course Description:** This course is an investigation of the major life history stages of birds. We will discuss topics including: evolution of birds, reproduction, migration, flight, and a variety of current topics in ornithology. Assigned readings from the scientific literature, exams, inquiry based activities/assignments, and online discussions will be used to explore these topics. Plan to spend several hours each week on reading, writing, responding to topic discussions, and participating in activities.

#### **Course Objectives:**

- 1). Gain familiarity with basic biology of birds
- 2). Examine and discuss recent research for current topics in avian biology
- 3). Learn basic identification skills for birds, students will develop a species list for the local region in which they reside
- 4). Learn techniques used to study birds and identify potential research questions from discussions of current literature

**Instructor Role:** As your instructor I will provide feedback to students in two ways. First, I will participate in directing online class discussions by providing background information where

appropriate, providing initial topics for discussion, reading comments posted by students, and providing clarification or summary information for student comments. In addition I will likely comment on individual student posts, but I may not comment on every single post for every student. Any comments or observations I post will be made available to all students via the general discussion board, unless they concern a personal matter. Second, students will receive individual feedback for several major assignments.

### **Required Text & Equipment:**

#### 1. A regional field guide.

For students in North America I recommend one of the following three field guides:

- ❖ Dunn, J.L., and J. Alderfer. 2017. *National Geographic Field Guide to the Birds of North America*, Seventh Edition.
- ❖ Sibley, David Allen. 2014. *The Sibley Guide to Birds*, Second Edition.

#### 2. Webcam and Binoculars (Best magnification for beginning birders are 8 x 42 binoculars)

Please let me know if you would like recommendations.

1. **Required Hardware/Software:** Students should refer to the following eCampus website to make sure you meet the minimum hardware/software and internet connection speed required by all UNK eCampus students.

eCampus requirements: [https://canvas.unk.edu/courses/25822/pages/minimum-computer-requirements?module\\_item\\_id=525687](https://canvas.unk.edu/courses/25822/pages/minimum-computer-requirements?module_item_id=525687)

**NOTE: Microsoft Office Word is the only acceptable word processing software for this course (All other file formats are unacceptable for submitting online documents).** This software is available for download with your Office365 account. Please go to the following link to learn more about getting setup with appropriate software.

[http://www.unk.edu/offices/its/instructional\\_technology/office365\\_unk\\_email/index.php](http://www.unk.edu/offices/its/instructional_technology/office365_unk_email/index.php)

**Academic Integrity:** UNK's Policy is the maintenance of academic honesty and integrity is a vital concern of the University community. Any student found in violation of the standards of academic honesty shall be subject to both academic and disciplinary sanctions. Academic dishonesty includes, but is not limited to, the following: Cheating, Fabrication and Falsification, **Plagiarism**, and Other Acts of Academic Dishonesty. You are expected to uphold the UNK standard of Student Conduct relating to Academic Integrity. You assume full responsibility for the content and integrity of the work you submit. Academic integrity will be strongly enforced in this course and plagiarism will not be tolerated. All assignments will be scanned through Turnitin via Canvas. **Students who plagiarize any part of their writing assignments will fail this course.**

**Class Participation:** Regular participation each week is important for successful completion of this course. The student is expected to complete coursework by the assignment deadlines.

Reasons for not completing assigned work on time may include: illness, hospitalization, injury, family emergency, or other situations that cannot be avoided; however, documentation for incomplete work must be provided to the instructor. Negotiations may be made at time of occurrence, if the reason for missing an assignment deadline is acceptable in the opinion of the instructor. **Students must contact the instructor prior to missing a scheduled coursework!**

**Grading System:** Grades will be determined according to the following scheme:

	<b>Assignments</b>	<b>Points</b>
1	Personal Introduction	10
2	Group Topic Assignments	
	<i>Topic</i>	20
	<i>Outline</i>	30
	<i>One-page Summary</i>	50
3	Group Discussions of Presentations	40
4	Quizzes (11, 10pts each)	110
5	Group Discussions (6 discussions, 20pts each)	120
6	Essay Exams (3, 100pts each)	300
7	Powerpoint Presentation - GroupTopic	100
8	Field Observations & Notebook	100
<b>Total Course Points</b>		<b>880</b>

**Grading Scale:**

93 - 100 % = A	78 - 79 % = C+	60 - 62 % = D-
90 - 92 % = A-	73 - 77 % = C	59% or less = F
88 - 89 % = B+	70 - 72 % = C-	
83 - 87 % = B	68 - 69 % = D+	
80 - 82 % = B-	63 - 67 % = D	

### **Students with Disabilities**

It is the policy of the University of Nebraska at Kearney to provide flexible and individualized reasonable accommodation to students with documented disabilities. To receive accommodation services for a disability, students must be registered with the UNK Disabilities Services for Students (DSS) office, 175 Memorial Student Affairs Building, 308-865-8214 or by email [unkdso@unk.edu](mailto:unkdso@unk.edu)

### **UNK Statement of Diversity & Inclusion:**

UNK stands in solidarity and unity with our students of color, our LatinX and international students, our LGBTQIA+ students and students from other marginalized groups in opposition to racism and prejudice in any form, wherever it may exist. It is the job of institutions of higher education, indeed their duty, to provide a haven for the safe and meaningful exchange of ideas

and to support peaceful disagreement and discussion. In our classes, we strive to maintain a positive learning environment based upon open communication and mutual respect. UNK does not discriminate on the basis of race, color, national origin, age, religion, sex, gender, sexual orientation, disability or political affiliation. Respect for the diversity of our backgrounds and varied life experiences is essential to learning from our similarities as well as our differences. The following link provides resources and other information regarding D&I: <https://www.unk.edu/about/equity-access-diversity.php>

### **Students Who are Pregnant**

It is the policy of the University of Nebraska at Kearney to provide flexible and individualized reasonable accommodation to students who are pregnant. To receive accommodation services due to pregnancy, students must contact Cindy Ference in Student Health, 308-865-8219. The following link provides information for students and faculty regarding pregnancy rights. <http://www.nwlc.org/resource/pregnant-and-parenting-students-rights-faqs-college-and-graduate-students>

### **Reporting Student Sexual Harassment, Sexual Violence or Sexual Assault**

Reporting allegations of rape, domestic violence, dating violence, sexual assault, sexual harassment, and stalking enables the University to promptly provide support to the impacted student(s), and to take appropriate action to prevent a recurrence of such sexual misconduct and protect the campus community. Confidentiality will be respected to the greatest degree possible. Any student who believes she or he may be the victim of sexual misconduct is encouraged to report to one or more of the following resources: **Local Domestic Violence, Sexual Assault Advocacy Agency** 308-237-2599; **Campus Police (or Security)** 308-865-8911; **Title IX Coordinator** 308-865-8655

Retaliation against the student making the report, whether by students or University employees, will not be tolerated.

If you have questions regarding the information in this email please contact **Mary Chinnock Petroski, Chief Compliance Officer** ([petroskimj@unk.edu](mailto:petroskimj@unk.edu) or phone 8400).

**Veterans Services:** UNK works diligently to support UNK's military community by providing military and veteran students and families with resources and services to help them succeed. Veterans Services assists with the GI Bill process and acts as a liaison between the student and the Veterans Administration. If you need assistance or would like more information, please contact Lori Weed Skarka at 308-865-8520 or [unkveterans@unk.edu](mailto:unkveterans@unk.edu).

**Class Schedule & Assignments:** A general class schedule can be found below. There will be recorded video lecture(s) each week, for general lecture topics, posted Tuesday by 5pm CST. In addition, readings from the primary literature will be assigned in some weeks. Exams will be essay and will cover topics discussed during the course. Assignments include written

assignments, data analysis, and/or simulation activities. **Due Dates for each assignment will be provided when the assignment is announced.** Due dates must be followed and assignments are due by **midnight CST** on the date given, specific dates will be specified when the assignment is posted. For assignments turned in late a penalty of 5 points per day will be deducted until the assignment is no longer worth any points.

**Note:** The instructor reserves the right to modify the class schedule and assignments if necessary; however, students will be informed of minor modifications via Canvas announcements.

### **Group topic assignment (Current Ornithology)**

The field of ornithology is diverse and encompasses a variety of topics, which results in many publications each year. During the lecture/discussion part of this course I will introduce some of the basic concepts and basic biology of birds and will also cover a few areas in more depth, but it will not be possible to cover the entire scope of topics in this course. Therefore, the class will work together to write and present a series of topics to summarize key areas of research within the field. Students will first be randomly assigned to a group of two or three students, then as a group you will choose a topic of interest from a list provided during the second week of class. Groups will prepare a short one-page summary of the topic via Google docs and include an appropriate paper from the primary scientific literature. Groups will also then prepare a short 12 - 15 minute presentation, on the topic. During the last two weeks of class, students will be responsible for watching, commenting and discussing topics presented by the class.

To prepare the one-page summary and presentation, groups should read several key papers on your group's topic from the relevant literature (e.g., journals such as *The Auk*, *Condor*, *IBIS*, *Waterbirds*, *Journal of Field Ornithology*, etc.). Also, we will use Zoom to record group presentations, then you will share the recorded file with me and I will post them on Canvas. During group topic presentations, we will use discussion boards to identify interesting points brought out by the presentations and written summaries provided by each group.

### **Field Notebooks & Observation Activities**

Students will also complete observations of birds in the field via observation activities and via virtual field trips. I will provide 3 virtual field trips that you can either join me via Zoom in real-time or participate in, by watching the recording. Observation activities will be assigned to practice basic bird identification skills. Four observation activities and three virtual field trips will be required throughout the course and a field notebook will be used to document observations and species observed. The final field notebook will also include a species list of all the birds observed throughout the duration of the course. Students are encouraged to participate in additional observation activities throughout the course and you are welcome to include these in your field notebooks as well.

**Expectations:** Students are expected to keep up with assigned course material and are responsible for checking announcements and assignments for each week. All grades will be

based on participation and the quality of the assignment or discussion board post. For most discussions, student should be able demonstrate that they read and thought about ideas presented in the papers.

<b>Table 1. Avian Life History Course Schedule</b>					
<b>Week</b>	<b>Date</b>	<b>Assignments</b>	<b>Discussion</b>	<b>Lecture Topics</b>	<b>Reading Topic</b>
1	Jan 23	Personal Introduction, Avian Topography & Identification Skills Activity, and Quiz 1:Avian Div. – Due Jan 31st		Introduction to Birds; Avian Diversity & Classification	
2	Jan 30	Field Notebooks, Observation Activity 1 and Quiz 2:How Birds Evolve- Due Feb 7th		How Birds Evolve	Evolution in birds
3	Feb 6	Observation Activity 2, Current Topic Assignment; Quiz 3:Feathers etc. – Due Feb 14th	1	Feathers & Plumages; Avian Flight	
4	Feb 13	<b>Exam 1-DUE Feb 21<sup>st</sup> – Lecture topics weeks 1-3;</b> Quiz 4:Avian Anatomy – Due Feb 21st		Avian Anatomy	Physiology
5	Feb 20	Observation Activity 3, Current Topic Outline, and Quiz 5:Bird Physiology – Due Feb 28th	2	Bird Physiology	Social Networking in Avian Communities
6	Feb 27	Quiz 6:Avian Food & Foraging – Due Mar 7th	3	Avian Food & Foraging	Maternal Effects
7	Mar 6	Current Topic Summary, Quiz 7:Avian Mating & Social Behavior – Due Mar 21st	4	Avian Mating & Social Behavior	
	<b>Mar 13</b>	<b>Spring Break</b>			
8	Mar 20	<b>Exam 2 – Due Mar 28<sup>th</sup>– Lecture topics weeks 4-7</b> Quiz 8:Breeding Biology of Birds – Due Mar 28th		Breeding Biology of Birds	Extra-pair fertilizations, brood parasitism
9	Mar 27	Quiz 9: Avian Vocal Behavior – Due Apr 4 <sup>th</sup> <b>Current Topic Presentations – Due Apr 24th</b>	5	Avian Vocal Behavior	Avian vocalization
10	Apr 3	Observation Activity 4,	6	Avian Migration	

		Quiz 10:Avian Migration – Due Apr 11th			
11	Apr 10	Quiz 11:Ecology & Conservation of Bird Pop’s – Due Apr 18th		Ecology & Conservation of Bird Populations	
12	Apr 17	<b>Exam 3 – Due Apr 25<sup>th</sup> – Lecture topics weeks 8-11</b>			
13	Apr 24	Current Topic Presentations	Group Discussions		
14	May 1	Current Topic Presentations	Group Discussions		
15	May 8	Final Field Notebook <b>Due – May 16th</b>			