

Course Title & Number: **BIOL 869 Conservation of Birds and Mammals**
Credits: 3
Class Time: Summer 2021, Online
Instructor: Dr. Dustin Ranglack, Bruner Hall 343
Contact information: 308-865-8545, rangelackdh@unk.edu
Student Hours: By appointment

I. COURSE DESCRIPTION:

"Wildlife" is often defined as wild birds and wild mammals. In this definition, it does not include other vertebrates (fish, amphibians, or reptiles), nor does it include invertebrate animals. Birds and Mammals are often highly visible, economically important, and especially in the case of "charismatic megafauna" – the focus of public debate regarding the conservation and management of wildlife species. This class is designed as a course that applies elements of wildlife ecology, population dynamics, and conservation biology to the conservation and management of birds and mammals. While providing a review of the fundamentals, this course offers an in-depth investigation of the management, conservation, and population ecology of various birds, ungulates, large carnivores, and selected small mammals.

II. COURSE MATERIALS:

Text & Supplies:

- 1) Mills. Conservation of Wildlife Populations

III. COURSE OBJECTIVES:

In accordance with the Mission and Goals of the University and the Biology program, the following course objectives have been established:

- 1) Describe connections between Conservation science and other disciplines, and express the relevance of conservation to your daily life and health.
- 2) Understand the basic principles of wildlife conservation: how wildlife is a finite natural resource, how population sizes can be estimated, understand concepts of habitat and home range.
- 3) Understand how hunting affects game populations and wildlife in general.
- 4) Work effectively in groups, collaborating in team investigations, providing constructive feedback to peers, and utilizing constructive feedback from peers.
- 5) Last, and possibly the most important objective, what can you do for conservation.

IV. Performance Assessment: Your grade will be determined based 50% on problem solving assignments and 50% on group discussions. There is no provision for doing extra or outside work for improving your grade.

Practice Exercises. Most of the chapters have data analysis exercises and Excel problems. You will need to complete some of these, as well as some additional exercises, to gain practice with the concepts that we discuss in lectures. Full details for each of these assignments will be posted on Canvas. These will make up 50% of your final grade.

Discussion Groups:

You will be broken into small groups and expected to participate in 4 group video discussions via Zoom to discuss the readings and other materials, each worth 50 points. You will be divided into groups based on your general availability (weekdays, weekends, morning, afternoon, evening) and are expected to record your discussions and submit them for credit. I will try to join at least one discussion from each group during the semester. You can use this time to discuss the lecture material, ask and answer each others questions, work on the chapter exercises as a group, etc. As long as you are prepared and actively participate with your group, you can expect to earn these points. This makes up 50% of the total grade.

The grading scale used for this class is as follows:

A (93-100%), A- (90-92.9%), B+ (88-89.9%), B (83-87.9%), B- (80-82.9%), C+ (78-79.9%), C (73-77.9%), C- (70-72.9%), D+ (68-69.9%), D (63-67.9%), D- (60-62.9%), and F (below 60%).

In general, grades for the course will be assigned as:

A – Indicates that the work is markedly superior and is without major problems. It is an honors grade denoting that the goals for the class have been achieved in exemplary fashion.

B – Indicates that the work has met all of the requirements of the assignment or course at a level that is consistently above average.

C – Indicates satisfactory work that is consistently average and that meets the course goals at a sufficient level to pass.

D – Indicates the minimal achievement in order to earn credit, even though the work is below the standard required for good academic standing.

F – Indicates failure to complete an assignment or course, or work that does not fit into the requirements of the assignment or course.

Student Responsibilities:

Email: You must use your UNK email to receive any updates associated with the course. Email is also a quick and convenient way to contact your professors regarding questions associated with the course. However, please be thoughtful when sending emails as emails sent after 3 pm on Fridays will be answered on the following Monday.

Course Policies: Classrooms should be considered sanctuaries for the pursuit of knowledge. Those who enter them should be committed to learning and to respect the ideas and opinions of others. Undesirable behavior in the class will lead to dismissal from the lecture or laboratory session and even expulsion from the course. Undesirable behavior includes (but is not limited to), harassment of any kind, disrupting class when arriving late, and continuously talking at inappropriate times during class sessions.

Late Assignments: Without a valid excuse, any assignment not turned in on time is a late assignment. Late assignments will be docked 10% of the total possible points per day.

Academic Integrity and Academic Honesty: This course, like all UNK courses, abides by all University policies as outlined in the UNK Student Handbook, which contains the UNK Student Code of Conduct. More information can be found in the University Undergraduate catalog (<https://catalog.unk.edu/undergraduate/>).

Plagiarism and Cheating: Anyone found plagiarizing or cheating will receive a 0 for that assignment; subsequent violations will result in referral to the Vice Chancellor for Academic Affairs. Cheating (at any level) is an intolerable behavior that has no place in any scientific, educational, or social activity. Penalties for cheating and plagiarism can be found in the University catalog (<http://catalog.unk.edu>).

Policy on Withdraw (W) and Incomplete (I) grades: Students may not withdraw past the mid-point of a class unless extenuating circumstances exist, in which case the student may receive a “W”. Extenuating circumstances are defined as circumstances that occur AFTER the mid-point of the course and beyond the control of the student which in the judgment of the Vice Chancellor for Academic Affairs, in consultation with the Exceptional Withdrawal Committee, constitute appropriate cause for withdrawal.

Students will receive a "W" on their transcript (which indicates a withdrawal) for classes dropped on or after the first day of the class. A failing grade of "F" will be recorded on the transcript if a student stops attending class and neither officially withdraws from the course prior to the appropriate deadline nor establishes, prior to the end of the class and to the satisfaction of the instructor, that extenuating circumstances prevented completion of the course.

To be considered for an incomplete, a mark of "I" is reserved for conditions in which a student has been unable, due to circumstances beyond his or her control, to complete the course by the end of the term. Unless an extension of time is granted in writing by the Office of Student Records and Registration, an incomplete must be removed within twelve calendar months. If the course work is not completed during this time, then the "I" will convert to an "F" on the student's transcript and cannot be changed other than by re-registering for the course.

If an extension is desired, the student must initiate a written request for a specific time of extension, must exhibit extenuating circumstances beyond his/her control, and must make the request in advance of the twelve-month expiration. The request must be supported by a written endorsement from the course instructor, or the department chairperson in the absence of the instructor and submitted to the Registrar's Office prior to the expiration of the twelve-month period.

Distribution of course materials: Audio or video recording, digital or otherwise, of lectures, seminars or any other teaching environment by students is allowed only with the prior written consent of the instructors or as a part of an approved accommodation plan. Student or instructor content, digital or otherwise, created and/or used within the context of the course is to be used solely for personal study, and is not to be used or distributed for any other purpose without prior written consent from the content author(s). Any further use or dissemination of this material may be in violation of Federal copyright law and University sanctions including failure in the course.

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

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.

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.

Tentative Schedule:

| Week | Topic | Reading | Practice Exercises (subject to change) |
|-------------|---|----------------|--|
| 1 | The Big Picture and Study Design | Ch 1-2 | |
| 2 | Genetics | Ch 3 | Ch 3 Exercises |
| 3 | Vital Rate Estimation and Population Growth | Ch 4-5 | Ch 4 Exercises Parts I and II, Ch 5 Parts I and II |
| 4 | Structured Population Models and Density Dependence | Ch 6-7 | |
| 5 | Predation and Genetic Variation | Ch 8-9 | Ch 8 Exercises, Ch 9 Part I, PS 5 |
| 6 | Multiple Populations and Human Stressors | Ch 10-11 | PS 10 |
| 7 | Small and Declining Populations | Ch 12 | PS 9 |
| 8 | Focal Species and Sustainable Harvest | Ch 13-14 | PS 14 |