Spring, 2021

Course Syllabus: Conservation Biology BIOL 834-01, 3 credits Spring 2021

Instructor:

Dr. Letitia Reichart Assistant Professor of Biology Biology Department, BHS 318 University of Nebraska Kearney 2401 11th Avenue Kearney, NE 68849 **Phone:** 308-865-8568 **Email:** <u>reichartlm@unk.edu</u>

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 in Blackboard.

Office Hours:

Mon 12:30-1:30pm, Wed 9:00-10:00am, Thur 10:30-11:30am, Fri 10:15-11:15am or by appointment. All office hours will be held virtually via zoom. Zoom links for office hours will be available on the Canvas course webpage.

University Policies Related to COVID-19: The university community is deeply concerned for the well-being of its students, faculty, and staff. Keeping each other as safe as possible will require commitment from each of us; failure to do so will literally place lives in danger. The full policy relating to mitigation of the spread of infectious diseases can be found at <u>https://www.unk.edu/coronavirus/</u> Policies that apply to all courses (online, remote, blended, or face-to-face) include:

Students shall monitor their health daily. No student shall attend classes in
person while sick. Those who have had contact with positive-tested individuals
or show COVID-19 related symptoms must have clearance from the Public
Health Center prior to returning to face-to-face classes. There will be <u>no
penalties</u> for missing classes for COVID-19 related absences. Students will still
be responsible for course content through alternative attendance or other
options arranged with the instructor.

Additional policies specific to face-to-face instruction include the following:

 During Phases I and II, all students are <u>required</u> to wear masks that cover the nose and mouth at all times during class and at any time, inside or outside, where physical distancing of at least 6' is not possible. Instructors shall maintain 16' of distance from students while lecturing but may be closer, if masked. Instructors have the authority to direct students who refuse to wear masks to leave the classroom. Students who have medical issues that make masks inadvisable should contact Disability Services for Students at 308-865-8214 to request an exemption.

- 2. Students shall not arrive for class more than 5 minutes before the scheduled start time for the course. Instructors shall dismiss students promptly at the end time and all shall leave the classroom promptly. Students who have questions should use office hours rather than before/after class times.
- 3. Instructors and students should clean their desks prior to class. Cleaning materials will be provided.
- 4. Additional requirements for Phase III, for specialty courses such as labs or performing arts, or for experiential learning are detailed below.
 - a. For BIOL 834: During Phase III, students are <u>required</u> to wear masks that cover the nose and mouth at all times during class. This will continue until Dr. Reichart deems it safe to not wear masks.

Questions regarding COVID-19 should be directed to the Public Health Center <u>unkhealth@unk.edu</u> or 308-865-8254. Questions regarding the COVID-19 academic policy should be directed to Sr. Vice Chancellor Bicak at <u>bicakc@unk.edu</u>. Questions regarding department specific requirements should be directed to the chair of the Biology department - Dr. Julie Shaffer, BHS 335, 308-865-8661, <u>shafferjj@unk.edu</u>

The above directions must be followed by everyone for the health and safety of our University. Students who do not comply may face disciplinary action from the university. Violations of any University or Campus Policy is a violation of the Student Code of Conduct.

Course Description: This course is a broad sampling of conservation biology, where we will discuss some of its fundamental biological and ecological principles. We will cover a variety of topics including: threats to biodiversity, environmental policy (with respect to threatened and endangered species), techniques used in studies of conservation biology (e.g., methods of habitat restoration and conservation genetics), and discuss current issues in conservation biology. Assigned readings from the textbook and 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, and responding to topic discussions.

Course Objectives:

1). Gain familiarity with concepts in conservation biology and identify a variety of tools used by conservation biologists

2). Examine and discuss research regarding threats to biodiversity and methods of detecting threats to biodiversity

3). Determine various approaches to solving conservation problems and identify pros and cons for each approach

4) Gain hands on experience using some conservation biology tools

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/listening to 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. I will respond to every email sent from student UNK lopermail accounts, you can expect a response to your emails within 24 hours of sending, Monday-Friday. However emails sent on the weekends (or late on Friday) will not be seen until Monday morning.

Required Text & Equipment:

- Sher AA, Primack RB. 2020. An Introduction to Conservation Biology, Second Ed., Oxford University Press Inc., New York, NY, USA. ISBN 978-1-6053-5897-0
- 2. Webcam (e.g., built in to your personal computer or as an external plugin)

The required book can be purchased at The Antelope Bookstore <u>http://unk.bncollege.com/webapp/wcs/stores/servlet/BNCBHomePage?catalogId=10001&langId=-</u> <u>1&storeId=87923</u> or with your favorite online bookseller.

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: <u>https://canvas.unk.edu/courses/25822/pages/minimum-computer-requirements?module_item_id=525687</u>

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

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. <u>Students who</u> plagiarize any part of their writing assignments will fail this course.

	Assignments	Points
1	Personal Introduction	10
2	Group Topic Assignments	
	Торіс	20
	Outline	30
	One-page Summary	50
	Draft Presentation	30
3	Chapter Quizzes (11, 10pts each)	110
4	Group Discussions (7 discussions, 10pts	70
	each – 3 posts required)	
5	Essay Exams (2, 100pts each)	200
6	Powerpoint Presentation - GroupTopic	100
7	Presentation Discussions	20
8	Peer Evaluation of Group Work	20
9	Group Problem Sets (2, 50pts each)	100
	Total Course Points	760

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

Grading Scale:

78 - 79 % = <i>C</i> +	60 - 62 % = D-
73 - 77 % = C	59% or less = F
70 - 72 % = <i>C</i> -	
68 - 69 % = D+	
63 - 67 % = D	
	78 - 79 % = C+ 73 - 77 % = C 70 - 72 % = C- 68 - 69 % = D+ 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 <u>unkdso@unk.edu</u>

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: <u>https://www.unk.edu/about/equity-access-diversity.php</u>

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. <u>http://www.nwlc.org/resource/pregnant-and-parenting-students-rights-fags-college-and-graduate-students</u>

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 (<u>petroskimj@unk.edu</u> 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 <u>unkveterans@unk.edu</u>.

Class Schedule & Assignments: A general class schedule and reading assignments can be found below. There will be two-three recorded video lectures each week for general lecture topics. I will also assign readings from the textbook and the primary literature to supplement lecture material. A discussion topic will be provided seven weeks that examines the general topic with respect to the reading from the primary literature. Exams will be essay and will cover topics discussed prior to the exam. The final two weeks of class will be focused on current topics presented by student groups. Presentation viewing and discussion will be posted on Canvas. Due dates must be followed and assignments are due by midnight CST on the date given, dates will be specified when the assignment is posted. For assignments turned in late, a penalty of 5 points per day will be deducted.

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 Conservation Biology)

The field of conservation biology is vast, diverse, and encompasses a variety of topics, which results in a large number of publications each year. During the lecture/discussion part of this course I will introduce some of the basic concepts and basic background of conservation biology 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 8-10 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 *Biodiversity and*

Conservation, Biological Conservation, BioScience, Conservation Biology, Conservation Letters, Ecological Applications, Trends in Ecology and Evolution, 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.

Group Problem Set Activities

We will complete two problem sets during this course to demonstrate a few tools that can be used in conservation biology. These problem sets will be completed in assigned groups and we will work together to complete them.

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 discussion board posts, most all should be video recorded posts (2 min or less), content should be a critical evaluation of the topic we discuss and should not be a brief thoughtless response, such as "this was a really cool study," OR "I agree with the other members of the group," etc. I expect students to spend time thinking about ideas, providing quality comments and/or posing articulate questions for each discussion topic. Most weeks will require two or more discussion posts per student. I <u>will not require</u> all discussion board posts to have comments with citations; however, I expect students will be able to use information gleaned from lectures or assigned primary literature to provide appropriately detailed comments.

In addition, I expect students to use appropriate language (e.g., profanity and derogatory comments are unacceptable), to respect differences in opinion, and to show evidence of knowledge on the subject matter (i.e., gleaned from assigned readings)

Table 1. Conservation Biology Course Schedule					
Date	Week	Assignments	Discussion Board	Lecture Topics	
Tan 25	1	Personal Introduction; Read Ch. 1; Read Primary Research article 1 Ch. 1 Quiz	1	Defining Conservation Biology	
Feb 1	2	Read Ch.2 & 3 Ch.2 & 3 Quizzes Group Work: Quantifying Biodiversity & Current		What is biodiversity? The Value of Biodiversity: Part 1	

		Topic List		
Feb 8	3	Read Ch. 4 Ch. 4 Quiz Read Primary Research article 2 Group Current Topics	2	The Value of Biodiversity Part II Threats to Biodiversity: Habitat Change
Feb 15	4	Read Ch. 5 Ch. 5 Quiz Read Primary Research article 2	3	Climate Change & Other Threats to Biodiversity
Feb 22	5	EXAM 1		
Mar 1	6	Read Ch. 6 Ch. 6 Quiz Read Primary Research article 3	4	Extinction Risk
Mar 8	7	Read Ch. 7 Ch. 7 Quiz Group Work: Population Viability Analysis Outline for Group Current Topic Presentation		Conserving Populations & Species
Mar 15	8	Read Ch. 8 & 9 Ch. 8 & 9 Quizzes		Establishing New Populations & Ex Situ Conservation; Protected Areas
Mar 22		Read Ch. 10 Ch. 10 Quiz Read Primary Research Article 4	5	Conservation Outside Protected Areas
Mar 29		Read Ch. 12 Ch. 12 Quiz Read Primary Research Article 5 Draft of Group Current Topic Presentation	6	The Challenges of Sustainable Development
April 5		EXAM 2		

	Read Ch. 13		An Agenda for the	
	Finish Final Group		Future	
	Presentations & One-			
April 12	Page Summaries	7		
	Group Presentations			
	Part 1			
	Peer Evaluations &			
	Presentation			
April 19	Discussions			
	Group Presentations			
	Part 2			
	Peer Evaluations &			
	Presentation			
April 26	Discussions			
May 3	Finals Week			