Animal Community Ecology
Fall 2020

Instructor: Dr. Dustin Ranglack
ranglackdh@unk.edu (best way to reach me)

Office Hours: Tuesday and Friday 10:30 am – 12:00 noon (email me and I will send you a zoom link) or by appointment

Text: Foundations of Ecology (editors: L.A. Real and J.H. Brown) and other assigned readings. Reading that is not available in the book will be made available on the class Canvas site.

Course Objectives: Following successful completion of this course, students will have developed the following skills:

1. A graduate-level understanding of central concepts in community ecology
2. Ability to read, synthesize and think critically about primary scientific literature
3. Experience with collaborative research in community ecology

General Course Structure and Expectations: This course is a mixture of lecture, online discussion of primary literature and hands-on experience focused around a research project. You are expected to be prepared to discuss the assigned papers. Failure to do so will negatively affect your grade in the course. *This course is designed to provide advanced training for graduate students in a specialized area of ecology.*

Course Policies: The Canvas site and your video discussions 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 will lead to dismissal from the discussion board and even expulsion from the course. Undesirable behavior includes (but is not limited to), harassment of any kind or inappropriate or unrelated comments.

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 on page xv of the university catalog.

Late assignments: Unless arrangements have been previously arranged, any assignment not turned in on time is a Late Assignment. Late assignments will be docked 10% of its total possible points per day, including holidays and weekends.

Assessment/Grades:
40% of grade will be based on a group research project, 10% will be based on conducting a peer-review of another groups project, and 50% will be based on participation in discussion.

Discussion: This is the primary means by which your participation will be graded. You will be broken into small groups and expected to participate in at least 6 group video

discussions via Zoom to discuss the material we have gone over in the lectures, 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 2 discussions from each group during the semester. Talk about the strengths/weaknesses of each papers, what you found particularly interesting/helpful, how did the papers change the way you think, what new questions do you have after reading the papers, etc.

Group Projects: Because collaboration is an increasingly important skill in science, projects will be done groups. The project must be related to community ecology. However, the project does not need to be restricted to animals. The research paper should be written following the style guidelines for *Ecosphere.*

Grades:
The grading scale used for this class is as follows:

A (93-100%)
A- (90-92.9%)
B+ (87-89.9%)
B (83-87.9%)
B- (80-82.9%)
C+ (77-79.9%)
C (73-76.9%)
C- (70-72.9%)
D+ (67-69.9%)
D (63-66.9%)
D- (60-62.9%)
F (below 60%).

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

A – Indicates that the work is markedly superior and is without major problems. It is an honors grade denoting that the goals for the assignment or course have been achieved with distinction.

B – Indicates that the work has met all of the requirements of the assignment or course at a level that is consistently above average, and the student has achieved most of the goals.

C – Indicates satisfactory work that is consistently average and that meets the course goals at a sufficient level to pass, even though there may be some problems with the work.

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 or meet acceptable standards, so that no credit can be awarded.

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 https://www.unk.edu/coronavirus/ 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 no penalties 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:

1. During Phases I and II, all students are required 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.

Questions regarding COVID-19 should be directed to the Public Health Center unkhealth@unk.edu or 308-865-8254. Questions regarding the COVID-19 academic policy should be directed to Sr. Vice Chancellor Bicak at bicakc@unk.edu. Questions regarding department specific requirements should be directed to Dr. Julie Shaffer, shafferjj@unk.edu.

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.

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.

SUBJECT TO CHANGE: This syllabus and schedule are subject to change in the event of extenuating circumstances. If you are absent from class, it is your responsibility to check on announcements or assignments made while you were absent.

Above all:
Your objective should be to enjoy this course and come away from it having gained a firm understanding of the underlying principles that govern animal community ecology. Participate in class discussions, ask questions, and consult the instructor if there is anything you need clarified.

Animal Community Ecology

Date	Topic	Reading (Subject to Change)
Week 1	Introduction to Course	Syllabus
Week 2	What is Community Ecology?	Thaler et al (2012) Rule et al (2012)
	The Niche	Hutchinson (1957), FoE Connell (1961) FoE Araujo & Luoto (2007)
Week 3	Competition Group Project Discussion	Park (1948), FoE MacArthur (1958), FoE Pacala & Roughgarden (1982) Brown & Davidson (1977) Dunham (1980) Byers (2000)
Week 4	Predation Group project discussion	~~Huffaker (1958), FoE~~ ~~Nicholson & Bailey (1935), FoE~~ Paine (1966), FoE Holling (1959), FoE Brooks & Dodson (1965), FoE Schmitz (2008) Tallian et al. (2017)
Week 5	Mutualism	Janzen (1966) Palmer et al (2008)
	Indirect Interactions Group project discussion	Holt (1977) Schmitt (1987) Peacor & Werner (1997) Ranglack et al (2015)
Week 6	Projects	Catch up
Week 7	Coexistence Theories -*MacArthur, Tilman, and Chesson approaches* Research projects: Discuss project topics and work plans	MacArthur & Levins (1967) Excerpt from Chase & Leibold (2003) Adler et al (2007) Shea & Chesson (2003)
Week 8	Community Structure -*The original debate*	Gleason (1926), FoE Clements (1935), FoE Whittaker (1956), see Canvas for excerpts to read

	Community Structure *- other structures: character displacement, trait dispersion, phylogenetic structure*	Grant (1968) McGill et al (2006) Fukami et al (2005) Hoiss et al (2012)
Week 9	Project Week	We will spend time talking about progress/ issues/ strategies/ writing/ etc
Week 10	Diversity/Stability	MacArthur (1955) May (1973) MacNaughton (1977) Tilman and Downing (1994) Cardinale et al (2006) Tilman et al (2012)
Week 11	Food Webs	Cohen (1977) Williams & Martinez (2000) Dunne et al (2002)
	Food Webs – Trophic Cascades	Hairston et al (1960), FoE Chase et al (2000) Bascompte et al (2005)
	Trophic Cascades - Behavioral vs Demographic	Ripple and Beschta (2012) Marshall et al. (2013) Kohl et al. (2018)
Week 12	Metacommunity Theory	Leibold et al (2004) Chase et al (2010) Pandit et al (2009)
	Work on Projects	
Week 13	Neutral Theory	~~Excerpt from Hubbell (2001)~~ Hubbell (2005) ~~Hubbell (2006)~~ ~~McGill (2003)~~ Leibold & McPeek (2006) ~~Muneepeerakul et al (2008)~~
Week 14	Work on Projects	
Week 15	Macroecology	Brown and Maurer (1989) Hurlbert & Haskell (2003)
	Metabolic Theory	Brown et al (2004) ~~Anderson-Teixeira et al (2008)~~
Week 16	Work on Projects - PAPER DUE BY 5 PM on Friday, 11 December	

Note: syllabus subject to change. Check Canvas for changes. Changes made to the schedule on Canvas pre-empt this printed syllabus.