Animal Community Ecology
Fall 2018

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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 blackboard 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

Assessment/Grades:
40% of grade will be based on a class research project, 60% will be based on participation in discussion.

Discussion: This is the primary means by which your participation will be graded, and you will have two options on how to get this credit. First, there will be a weekly live video discussion (time TBD) that you can join in and if you **actively participate,** you will receive the points. If you are unable to participate live, you can watch the recorded discussion and then you are expected to contribute a minimum of one **meaningful** post to each discussion thread, as well as one response to another student's post. A meaningful post presents a new contribution to the discussion, not simply "I agree with others have said". Talk about the strengths/weaknesses of each paper, what you found particularly interesting/helpful, how did the paper change the way you think, what new questions do you have after reading the paper, etc.

Class Projects: Because collaboration is an increasingly important skill in science, class 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 *Ecology.* Research project topics must be approved by **Sept 30th.**

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 discussion boards 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.

Grading Scale: The grading scale used for this class is as follows:
A (93-100%), A- (90-92%), B+ (87-89%), B (83-87%), B- (80-82%), C+ (77-79%), C (73-76%), C- (70-72%), D+ (67-69%), D (63-66%), D- (60-62%), and 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.

Students with Disabilities or Those Who are Pregnant
Students with disabilities or those who are pregnant are encouraged to contact me for a confidential discussion of their individual needs for academic accommodation. It is the policy of the University of Nebraska at Kearney to provide flexible and individualized reasonable accommodation to students with documented disabilities or those who are pregnant. To receive accommodation services for a disability, students must be registered with UNK Disabilities Services Coordinator, David Brandt, in the Academic Success Office, 163 Memorial Student Affairs Building, 308-865-8214 or by email brandtdl@unk.edu. For those needing accommodation due to pregnancy, you need to visit with Student Health. 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

Attached is the link to the above statement for your convenience.
http://unkcms.unk.edu/offices/disability_services/

If you have an accommodation plan please see me as soon as possible, so we can make any arrangements necessary for your learning. No accommodations can be provided until a Reasonable Accommodation Plan is in place. Please remember, plans are not retroactive and cannot be used for assignments prior to the date of my signature.

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) 308-627-4811

Title IX Coordinator 308-865-8655

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

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), BB Rule et al (2012), BB
	The Niche	Hutchinson (1957), FoE Connell (1961) FoE Araujo & Luoto (2007), BB
Week 3	Competition	Park (1948), FoE MacArthur (1958), FoE Pacala & Roughgarden (1982), BB
	Competition Data availability & Group Project Discussion	Brown & Davidson (1977), BB Dunham (1980), BB Byers (2000), BB
Week 4	Predation	~~Huffaker (1958), FoE~~ ~~Nicholson & Bailey (1935), FoE~~ Paine (1966), FoE
	Predation Group project discussion	Holling (1959), FoE Brooks & Dodson (1965), FoE Schmitz (2008), BB
Week 5	Mutualism	Janzen (1966), BB ~~Grime et al (1987), BB~~ Palmer et al (2008), BB
	Indirect Interactions Group project discussion	Holt (1977), BB Schmitt (1987), BB Peacor & Werner (1997), BB 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), BB Excerpt from Chase & Leibold (2003), BB Adler et al (2007), BB Shea & Chesson (2003), BB
Week 8	Community Structure *-The original debate*	Gleason (1926), FoE Clements (1935), FoE Whittaker (1956), see BB for excerpts to read
	Community Structure *- other structures: character displacement, trait dispersion, phylogenetic structure*	Grant (1968), BB McGill et al (2006), BB Fukami et al (2005), BB Hoiss et al (2012), BB

Week 9	Project Week	We will spend time talking about progress/ issues/ strategies/ writing/ etc
Week 10	Diversity/Stability	MacArthur (1955), BB May (1973), BB MacNaughton (1977), BB
	Diversity/Stability	Tilman and Downing (1994), BB Cardinale et al (2006), BB Tilman et al (2012), BB
Week 11	Food Webs	Cohen (1977), BB Williams & Martinez (2000), BB Dunne et al (2002), BB
	Food Webs – Trophic Cascades	Hairston et al (1960), FoE Chase et al (2000), BB Bascompte et al (2005), BB
Week 12	Metacommunity Theory	Leibold et al (2004), BB Chase et al (2010), BB Pandit et al (2009), BB
	Work on Projects	
Week 13	Neutral Theory	~~Excerpt from Hubbell (2001), BB~~ Hubbell (2005), BB ~~Hubbell (2006), BB~~
	Neutral Theory	~~McGill (2003), BB~~ Leibold & McPeek (2006), BB ~~Muneepeerakul et al (2008), BB~~
Week 14	Macroecology	Brown and Maurer (1989), BB Hurlbert & Haskell (2003), BB
	Metabolic Theory	Brown et al (2004), BB ~~Anderson-Teixeira et al (2008), BB~~
Weeks 15	Work on Projects	
December 5	**PAPER DUE BY 5 pm**	

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