Population Ecology

BIO. 563/663

Dr. Sean Maher TEM 269 <u>spmaher@missouristate.edu</u> Office Hours T, TH 10:30am–12:00pm; W 11:00am–12:00pm

Grading

Students enrolled in 563 can drop 1 of the 3 regular exams; for those in 663, all 3 count: 2* or 3** exam (100pts) + final (150pts) = **350**pts* or **450**pts** (*563, **663) Lab assignments and homework: Point totals will vary from week-to-week but expect a total of ~**200**pts

Students enrolled in 663 will be responsible for 10–15 minute presentation on an applied population ecology problem.

~50pts

100–90% = A, 89–80% = B, 79–70% = C, 69–60% = D, 59% ≥ F

Text: A Primer of Ecology with R

Assigned readings from the primary literature will also be provided

Policies

- Attendance: Grades tend to be positively correlated with attendance, and participation in this type of course is taken into account when grades are determined. Lecture attendance may not be taken but you should realize this class is small enough that I will know you are missing. Lab attendance will be taken.
- Cell phones (including smart phones): As a member of the learning community, each student has a responsibility to other students who are members of the community. When cell phones or pagers ring and students respond in class or leave class to respond, it disrupts the class. Therefore, the Office of the Provost prohibits the use by students of cell phones, pagers, PDAs, or similar communication devices during scheduled classes. All such devices must be turned off or put in a silent (vibrate) mode and ordinarily should not be taken out during class. Given the fact that these same communication devices are an integral part of the University's emergency notification system, an exception to this policy would occur when numerous devices activate simultaneously. When this occurs, students may consult their devices to determine if a university emergency exists. If that is not the case, the devices should be immediately returned to silent mode and put away. Repeated use of a cell phone in lecture or lab will result in the loss of points towards your grade.
- Make-up exams: Make-up lecture exams will be given only if the instructor is notified prior to the test date and given a valid excuse. The validity of the excuse will be determined by the instructor (and be prepared to provide a doctor's note). No make-up tests will be given for lab practicals.

No food in the lecture or lab. Drink is only OK in the lecture, provided you don't spill. If you do

spill, be prepared to clean it up. No chewing tobacco in lecture or lab.

- Academic Misconduct: Missouri State University is a community of scholars committed to developing educated persons who accept the responsibility to practice personal and academic integrity. You are responsible for knowing and following the university's student honor code, <u>Student Academic Integrity Policies and Procedures</u> and also available at the Reserves Desk in Meyer Library. Any student participating in any form of academic dishonesty will be subject to sanctions as described in this policy. Cheating on tests or copying of field notes will result in a 0 for that assignment.
- Drop Policy: It is your responsibility to understand the University's procedure for dropping a class. If you stop attending this class but do not follow proper procedure for dropping the class, you will receive a failing grade and will also be financially obligated to pay for the class. For information about dropping a class or withdrawing from the university, contact the Office of the Registrar at 836-5520. Relevant drop deadlines can be found atwww.missouristate.edu/registrar/acad_cal.html.
- Communications: Do not expect that emails will be answered immediately, particularly those sent between the hours of 6:00pm and 9:00am. Please use office hours.
- Students who require assistance during an emergency evacuation must discuss their needs with their professors and the Disability Resource Center. If you have emergency medical information to share with me, or if you need special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible. For additional information students should contact the Disability Resource Center, 836-4192 (PSU 405), or Larry Combs, Interim Assistant Director of Public Safety and Transportation at 836-6576.For further information on Missouri State University's Emergency Response Plan, please refer to the following web site: http://www.missouristate.edu/safetran/erp.htm.
- To request academic accommodations for a disability, contact the Director of the Disability Resource Center, Plaster Student Union, Suite 405, (417) 836-4192 or (417) 836-6792 (TTY), <u>www.missouristate.edu/disability</u>. Students are required to provide documentation of disability to the Disability Resource Center prior to receiving accommodations. The Disability Resource Center refers some types of accommodation requests to the Learning Diagnostic Clinic, which also provides diagnostic testing for learning and psychological disabilities. For information about testing, contact the Director of the Learning Diagnostic Clinic, (417) 836-4787, http://psychology.missouristate.edu/ldc.
- Missouri State University is an equal opportunity/affirmative action institution, and maintains a grievance procedure available to any person who believes he or she has been discriminated against. At all times, it is your right to address inquiries or concerns about possible discrimination to the Office for Institutional Equity and Compliance, Park Central Office Building, 117 Park Central Square, Suite 111, 417-836-4252. Other types of concerns (i.e., concerns of an academic nature) should be discussed directly with your

instructor and can also be brought to the attention of your instructor's Department Head. Please visit the OED website at <u>www.missouristate.edu/equity/</u>.

At the first class meeting, students should become familiar with a basic emergency response plan through a dialogue with the instructor that includes a review and awareness of exits specific to the classroom and the location of evacuation centers for the building. All instructors are provided this information specific to their classroom and/or lab assignments in an e-mail prior to the beginning of the fall semester from the Office of the Provost and Safety and Transportation. Students with disabilities impacting mobility should discuss the approved accommodations for emergency situations and additional options when applicable with the instructor. For more information go to <u>http://www.missouristate.edu/safetran/51597.htm</u> and <u>http://www.missouristate.edu/safetran/erp.htm</u>.

Shelter: Evacuate the second and third floors using east and west stairs. Shelter in lower level hallways, and rooms 113, 116, 119, 125.

Evacuation: Southeast to McDonald Arena Gymnasium

Mammalogy Schedule Fall, 2015 Lecture: 11:00-11:50 AM, 217 Kings Street Annex Lab: Sec. 1: 11:15 - 1:05 F, Sec. 2: 1:25 - 3:15 F Plaster 247

Tentative Lecture Schedule

January		Chapter
11	Μ	Introduction and R basics Appendix A & B
13	W	R basics Appendix A & B
18	М	No Class Martin Luther King Jr. Holiday
20	W	Density-independent growth1
25	Μ	Density-independent growth1
27	W	Density-dependent growth
February		
1	Μ	Density-dependent growth
3	W	Density-independent demography2
8	Μ	Density-independent demography2
10	W	Exam 1
15	М	No Class President's Holiday
17	W	Populations in space4
22	Μ	Populations in space4
24	W	Lotka-Volterra (competition)5
29	Μ	Lotka-Volterra (competition)5
March		
2	W	Enemy-victim interactions (predator-prey)6
7	М	No Class Spring Break
9	W	No Class Spring Break
14	Μ	Enemy-victim interactions (predator-prey)
16	W	Enemy-victim interactions (disease)
21	Μ	Enemy-victim interactions (disease)
23	W	Exam 2
28	Μ	Island Biogeography
30	W	Succession
April		
4	Μ	Succession
6	W	Community Ecology10
11	Μ	Community Ecology10
13	W	Food webs7
18	Μ	Food webs7
20	W	Exam 3
25	Μ	Population viability analysis
27	W	Climate change
May		
2	Μ	Invasion
4	W	Genetics and Adaptation
9	Μ	Final Exam, 8:45am–10:45am

Tentative	e Lab S	Schedule (will meet in Kings Street computer lab)	
January	Chapter		
11	Μ	Introduction to R	Appendix A & B
18	М	No Class Martin Luther King Jr. Holiday	
25	Μ	Exponential growth	1
February			
1	Μ	Logistic growth	
8	Μ	Structured populations	2
15	М	No Class President's Holiday	
22	Μ	Metapopulations	4
29	Μ	Competition	
March		-	
7	М	No Class Spring Break	
14	Μ	Predation	6
21	Μ	Disease ecology	
28	Μ	Island biogeography	
April			
4	Μ	Succession	9
11	Μ	Community ecology	
18	Μ	Food webs	
25	Μ	PVA	
May			
2	Μ	Graduate Student Presentations	