Class times and location: Mondays 8:00-8:50 Humanities 305; Wednesdays 8:00-9:50 GH 232
Instructor: Dr. Jack Grubaugh Email: jgrubaugh@utm.edu Phone: 731-881-7194 Office: BH 248
Office hours: Monday through Friday 10:00-10:50

Course Objectives/Student outcomes:
1) Obtain an understanding of basic ecological principles with an emphasis on animal ecology
   and population biology;
2) understand how critical abiotic and biotic factors influence living organisms and ecology at the
   physiological, population, and community scales
3) use commonly-available spreadsheet software to model population dynamics

Prerequisite courses and essential resources:
1) It is assumed that all students have successfully completed the Foundations of Biology
   sequence (BIOL 130 & 140) or its equivalent before attempting this course. Prior mastery of
   content from this sequence is essential to understanding concepts in Animal Ecology.
2) Students will need to check their UT-Martin email accounts at least daily throughout the
   semester. Email is the primary means of information exchange for this class outside of lecture.
   Students are responsible for all class information within 24 hours after it is posted on email.
3) Students need access to and familiarity with Microsoft Office, which is available on all campus
   computers. Excel packages is necessary for class assignments, and the Powerpoint package
   will allow you to utilize the lecture outlines.
4) A hand calculator with square root and natural logarithm functions. Bring your personal
   calculator to all examinations; you will not be allowed to borrow one from another student. You
   may not use a phone app or apps associated with any communication device in lieu of a hand
   calculator during an examination.

Grading:
1) There are three lecture examinations worth 50 points each. Examinations focus on lecture
   material presented prior to each examination. However, ecological concepts build upon each
   other such that material presented earlier in the course may reappear on later examinations.
   Examination dates as presented in this syllabus and are not subject to change. Students
   arriving late for a lecture examination or the final will not be allowed to take that examination.
2) The final examination is worth 100 points and covers all material presented in the course.
   Attendance at the final examination is required. Failure to take the final examination will result
   in a grade of “F” for the course.
3) Missed lecture examinations
   a) Provisions for make-up examinations will be made only for university-sanctioned, non-
      Hellenic events that are brought to the instructor’s attention and supported with official
      documentation during the first full week of classes (i.e., no later than Friday, 30 August
      2013).
   b) If you are absent from one-and-only-one lecture examination, the grade for that
      examination will be replaced by 50% of the final examination grade. Likewise, a student
      may replace their lowest lecture examination score with 50% of the final examination
grade if this improves their course grade. This replacement policy only applies to one examination. If a second lecture examination is missed for any reason whatsoever, the grade for that lecture examination will be zero (0). A very strong word of advice: no one who has skipped the first examination of my course has ever successfully completed the course.

A total of 250 points are possible for this course:
1) Three lecture examinations, worth 50 points each 150 points
2) One comprehensive final examination, worth 100 points 100 points

The final grading scale is as follows:
A = 225 to 250
B = 200 to 224
C = 175 to 199
D = 150 to 174
F = less than 150

Behavior: Remember that you are not the only person enrolled in this class. Arriving late to class, leaving early, text-messaging, ringing cell phones, and use of electronics such as iPods or MP3 players are examples of rude behavior towards both your fellow classmates and the instructor. Such behavior will long be remembered by your fellow classmates and the instructor and will likely get you singled out in class. Remember that you are an adult, and you are responsible for your own behavior; act accordingly. Be in class on time or do not come at all. Text messaging will result in immediate dismissal from lecture; please go quickly and quietly if you're directed to leave because of such behavior.

Academic integrity: Students are expected to adhere to the standards of academic integrity as described in the Student Handbook (http://www.utm.edu/studenthandbook/stuhandbook0809.pdf); violations will be handled according to procedures outlined in the Handbook. Cheating or plagiarism will result in a minimum penalty of failure on the assignment and a maximum penalty of dismissal from the course with a grade of “F,” to be assigned at the instructor’s discretion. Likewise, students who allow other students to cheat off of them are subject to these same penalties. Once again, remember that you are now an adult responsible for your own behavior; act accordingly.

Attendance: Attendance is expected at all lectures, but the instructor realizes that unexpected absences (e.g., illness) will occur during this semester. As such, although attendance is kept for statistical and monitoring purposes, it is not used as means to determine grades. However, please read “1. Attend all lectures because:” in the Helpul hints section of this syllabus.

Special accommodations: Any student eligible for and requesting reasonable accommodations due to a disability is required to provide a letter of accommodation from the Student Success Center within the first two weeks of the semester.

Lecture and assignment schedule: On the following page is a schedule of the proposed lecture topics and examinations. The instructor reserves the right to modify the schedule of lecture topics as circumstances prescribe. Such modifications will be announced in class and/or by email. Examination dates are not subject to change.
<table>
<thead>
<tr>
<th>Date</th>
<th>Lecture Topic</th>
</tr>
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<tbody>
<tr>
<td>26-Aug</td>
<td>Introduction to the course and to Ecology</td>
</tr>
<tr>
<td>28-Aug</td>
<td>Abiotic driving variables I: large-scale climate</td>
</tr>
<tr>
<td>2-Sep</td>
<td>No class: Labor Day</td>
</tr>
<tr>
<td>4-Sep</td>
<td>Abiotic driving variables II: regional to microclimate</td>
</tr>
<tr>
<td>9-Sep</td>
<td>Physiological Ecology I: Water and solute balance</td>
</tr>
<tr>
<td>11-Sep</td>
<td>Physiological Ecology II: Energy and heat</td>
</tr>
<tr>
<td>16-Sep</td>
<td>Physiological Ecology III: Respiration and Decomposition</td>
</tr>
<tr>
<td>18-Sep</td>
<td>Correlation/Regression/Mark-Recapture: field data collection*</td>
</tr>
<tr>
<td>23-Sep</td>
<td>Examination I</td>
</tr>
<tr>
<td>25-Sep</td>
<td>Soil Ecology</td>
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<tr>
<td>30-Sep</td>
<td>Response to environmental variation</td>
</tr>
<tr>
<td>2-Oct</td>
<td>The Niche</td>
</tr>
<tr>
<td>7-Oct</td>
<td>Population structure and growth</td>
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<tr>
<td>9-Oct</td>
<td>Population growth and regulation</td>
</tr>
<tr>
<td>14-Oct</td>
<td>No class: Fall Break</td>
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<tr>
<td>16-Oct</td>
<td>Metapopulations</td>
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<tr>
<td>21-Oct</td>
<td>Population fluctuations and cycles</td>
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<tr>
<td>23-Oct</td>
<td>Population models: Excel2</td>
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<tr>
<td>28-Oct</td>
<td>Examination II</td>
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<tr>
<td>30-Oct</td>
<td>Competition</td>
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<tr>
<td>4-Nov</td>
<td>Competition models: Excel2</td>
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<tr>
<td>6-Nov</td>
<td>Predation</td>
</tr>
<tr>
<td>11-Nov</td>
<td>Herbivory, parasitism, parasitoidism, and mutualism</td>
</tr>
<tr>
<td>13-Nov</td>
<td>Herbivory, parasitism, parasitoidism, and mutualism</td>
</tr>
<tr>
<td>18-Nov</td>
<td>Examination III</td>
</tr>
<tr>
<td>20-Nov</td>
<td>Community concept and structure</td>
</tr>
<tr>
<td>25-Nov</td>
<td>Community structure and development</td>
</tr>
<tr>
<td>27-Nov</td>
<td>No class: Thanksgiving</td>
</tr>
<tr>
<td>2-Dec</td>
<td>Conservation Biology I</td>
</tr>
<tr>
<td>4-Dec</td>
<td>Conservation Biology II</td>
</tr>
<tr>
<td>9-Dec</td>
<td>Final Examination 07:45-09:45</td>
</tr>
</tbody>
</table>

*This class will meet at the aquaculture ponds on the university farm.*
Helpful hints:

1) Attend all lectures because:
   a) Lecture examinations are based on lecture material unless otherwise expressed.
   b) Extemporaneous material presented in lecture but not included in course outlines is “fair
game” for the lecture examinations.
   c) While lecture outlines and borrowed notes may be helpful, they are by no means nearly
as effective as hearing the material first-hand.
   d) A lot of topics are covered very quickly; “playing catch-up" from borrowed notes or
outlines is very difficult.
   e) Based on past performances, there invariably exists a significant negative correlation
between absenteeism and final grades. This will become evident as the course
progresses.

2) Get additional assistance, even if you don’t think you need it:
   a) Schedule appointments to speak with the instructor. It is always wise to get your
instructor to know who you are and not just a "face in the crowd." This is good advice
for all of your courses and instructors, not just for ZOOL 441.
   b) Form study groups. Not only does this help you study, but if a group of students
requests it, the instructor is more than willing to hold review sessions outside of
scheduled class time.

3) Waiting until right before exams to study or seek assistance is a complete waste of time.
   Establish a schedule of study/assistance times throughout the semester.

4) Policy on returned lecture exams
   a) Look the exams over immediately to be sure there is no error in grading
   b) If you believe there is an error in grading
      i. You have one (1) week (seven days) to bring the potential error to the instructor’s
      attention. The instructor will consider the merit of the student’s argument. If
      the argument is good, the instructor will award the student the points and recall
      all exams to see if the argument applies for other students (more on this in
      subsection c). Please remember that no successful argument ever started with
      the words, “What I meant to write was…”
   c) Do not lose your exams
      i. If a fellow student successfully argues for a grade change, the instructor will
      recall all exams to see if the argument applies to other exams. You will have 48
      hours to get your exam to the instructor. Students who miss this deadline will not
      be eligible for a grade change.
      ii. Lecture exams make excellent study tools for the final examination

If you have questions or problems with any of the class policies and procedures presented in this
syllabus or in the introductory lecture, you are urged to speak to the instructor immediately. When
such questions or problems are brought up later in the semester, the instructor will be much less
willing to listen.
This page provides the instructor with additional information about you that is not readily available through the class database. This information helps me in learning your goals, deciding what material needs to be stressed, and in getting to know you better. Please turn this in on the first day of class.

Your name: ___________________________________________________________

If you are not a Biology or NRM major, why are you taking Animal Ecology? ______
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________

Have you taken General Ecology (BIOL 331)?  YES  NO

What is one thing that you hope to learn about in this class? ___________________
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________

What do you plan to do following graduation? ________________________________
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________

Are you employed (circle one):  YES  NO

If it applies, are you employed (circle one):  PART-TIME  FULL-TIME

If it applies, where do you work and what do you do? _________________________
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________

What else do you do outside of class, or that makes you different? Please feel free to use the back of the page if you wish. _______________________________________
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