Foundations in Biology: Ecology & Evolution LAB  
Biology 206, Fall 2010  
Section 7 – Tuesdays 1:00pm-3:55pm – Colton biology lab 120L

Lab Instructor: TBD  
Lab Coordinator: Maria Stanko, mstanko@njit.edu, 434 Colton Hall  
Course Website: http://moodle.njit.edu/, login with UCID

This course is the laboratory component of Foundations in Biology: Ecology and Evolution. You MUST be registered for the lectures (Biology 205) to take the lab. The labs are designed to complement and elaborate upon concepts learned in the lecture, to give you hands-on experience making observations and gathering data, and to introduce you to common procedures and analyses used in the study of ecology and evolution.

Lab Preparation: For each lab, a lab handout and a lab worksheet will be posted on the course website by Friday morning of the previous week. Please read through both of these files thoroughly before coming to lab, and be sure to bring a print-out of BOTH files to each lab. Note that for some labs, you will need to bring handouts and worksheets for two labs. Please obtain a 3-ring binder to keep your lab handouts and worksheets organized into a lab notebook.

Lab Schedule:

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Assignments DUE</th>
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<tbody>
<tr>
<td>8/31</td>
<td>Lab 1: Measuring and Describing Phenotypic Variation</td>
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<tr>
<td>9/7</td>
<td>NO LAB</td>
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<tr>
<td>9/14</td>
<td>Lab 2: Genetic Change in Model Populations / Lab 3: C-fern</td>
<td>Lab 1</td>
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<td>9/21</td>
<td>Lab 4: Computer Simulation: Sickle-Cell Alleles / C-fern cont.</td>
<td>Lab 2</td>
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<td>9/28</td>
<td>Lab 5: Coevolution / C-fern cont.</td>
<td>Lab 4</td>
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<td>10/5</td>
<td>Lab 6: DNA lab 1</td>
<td>Lab 3</td>
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<td>10/12</td>
<td>Lab 7: DNA lab 2 / Lab 8: Competition</td>
<td>Lab 5</td>
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<td>10/19</td>
<td>Lab 9: Modeling Population Dynamics (Lemna)</td>
<td>Lab 6</td>
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<td>11/2</td>
<td>Lab 11: Optimal Foraging / Competition cont. / Lemna cont.</td>
<td>Lab 10</td>
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<td>11/9</td>
<td>Lab 12: Computer Simulation: Isle Royale / Competition cont. / Lemna cont.</td>
<td>Lab 11</td>
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<td>11/16</td>
<td>Lab 13: Island Biogeography / Lemna cont.</td>
<td>Lab 12 Results, Disc. Draft</td>
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<td>11/23</td>
<td>NO LAB</td>
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<tr>
<td>11/30</td>
<td>Lab 14: Aquatic lab</td>
<td>Lab 9 / Lab 13 / Lab 14</td>
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<td>12/6*M</td>
<td>NO LAB</td>
<td>Final lab report due (Lab 8)</td>
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Course Grade: Your grade for lab will be determined based on attendance, quizzes, worksheets, and one written lab report.

Quizzes: Starting 9/14, you will begin each lab with a quiz. Make sure you read the lab handout before coming to lab so you’re prepared for the quiz! Quizzes may also ask about material from previous labs, particularly for those labs which span multiple weeks.

Assignments: Each week, complete the worksheet that accompanies your lab handout. Some of it will be completed during the lab; often, there are analyses or interpretive questions that you’ll need to complete on your own time. Worksheets for each lab are due IN LAB the week after the lab is completed (see schedule above). Please note that while you usually work in groups during the lab and will share data and discuss results with your group, your worksheet and other parts of the assignment must be your own work.

Lab Report: You will write up one lab as a full lab report in the style of a scientific publication. A rough draft is required; any students who don’t turn one in will be deducted 25 points from the lab report score.

Point Breakdown: Attendance (5 pts/week)……………….60
Quizzes (5 pts/week)…………………………..60
Assignments (25 pts/ lab)………………..325
Lab Report (100 pts)………………..100

545

Lab Safety: General safety precautions:
- No eating or drinking in the lab.
- Wear closed-toed shoes to lab.
- Follow the directions for lab procedures and ask your TA if you’re unsure about how to operate any equipment.
- Keep an organized workspace and label all materials.
- Notify your TA immediately of any injuries, spills, or broken equipment.

Your lab handouts and your TA will alert you to safety concerns specific to a particular lab.

Attendance, Make-up, and Lateness Policy: Attendance at every lab is required and necessary to earn a good grade in lab. You will not be permitted to turn in a worksheet for a lab you did not attend. If you must miss lab for a valid reason, you may attend another lab section during the SAME week only, with documentation (doctor’s or dean’s note) of your absence. You MUST let your TA know if you want to make-up a missed lab. Late assignments will be deducted 10% of the points available for each 24 hours after the assignment was due.

Academic Dishonesty: The course has a zero tolerance policy for academic dishonesty, including plagiarism and cheating. Instances of dishonesty will be punished by a zero on the assignment and consultation with the office of the Dean of Students to determine if further action is required. If you have any questions about what constitutes plagiarism or cheating, please ask your TA or refer to the academic integrity code: www.njit.edu/academics/integrity.php.

Office Hours: The lab coordinator will hold office hours in the lab from 10:00am-12:00am on Fridays. During this time, the lab coordinator will be available to assist you with analyses or assignments.