Biology 131: Invasion Biology
Spring 2015: WF 2:30-3:50pm - Johnson 267

Instructors:
Sean Menke
Office: Johnson 207
Office Hours: 10-11am Monday, 10-11:30am Tuesday, or by appointment
Lab: Johnson 220
Phone: x6051
Email: menke@lakeforest.edu

Textbook 1: Thompson, K. 2014. Where Do Camels Belong?

Web Sites and Email: The Bio131 web site is: http://campus.lakeforest.edu/menke/. This site contains reading assignments from the primary literature, class schedule, a copy of the syllabus, and other important information about the course. It is updated regularly. You are responsible for checking your college email and the course web site daily. If you miss an assignment or other requirement because you miss an email from me, it is your responsibility. Please submit all assignments to me by email, subject line of email should contain the phrase “Bio131” to start (i.e. Bio131 Journal Report 1).

Course Objectives: This semester we will be using invasive species and the field of invasion biology to study the world around us and how it works. At the end of this course I would like you to be able to:
1) Understand what factors promote species occurrence and success.
2) Apply this knowledge to current global and societal issues, such as climate change, habitat alteration, biological control, agriculture and other human global commerce.
3) Develop a plan for reading, critically analyzing, and reporting on primary scientific literature.
4) Understand what conducting scientific research entails, including formulating hypotheses, synthesizing the results of multiple studies, placing results in the context of current literature, and explaining the outcome to the public.

Class Format: The classroom activities in the course will be a combination of lecture, discussion, and student driven inquiry. We will work on some projects jointly, in small groups, and individually, there will be student led discussions, training assignments, and field trips. This class is designed to be an open forum to help you gain the skills that you feel you are lacking and that will help you in future courses in the biology major. All classroom activities will be based upon readings done before class, so it is essential to come prepared and ready to discuss the assigned materials.

Class Presentations: Each of you will give four journal club presentations to the class on articles from the primary literature. These will be short presentations of approximately 5 minutes. Two will be done in groups and two will be given individually on a paper of your choosing.

Writing Assignments: Two short response papers will be written in groups on the first two journal club articles. You will then individually write two synthesis papers on an invasive species of their choice. You will also write two short essays on visiting seminar speakers. I strongly encourage you to use the writing center for these assignments.

Exams: There will be three short in class exams on the materials covered in class. Each exam will take 30-45 minutes and cover the material since the last exam. Topics will include information from the readings and discussion, tutorials conducted in class, and any field trips or videos.
**Final Project:** Your final project will be a three part synthesis paper and 12 minute presentation on an invasive species of your choice. You will revise and integrate your two previous papers on your species and add a third section discussing ecology and management of that species. The paper and presentation will be due on the day of your final.

**Grading:** I believe that a good grade requires hard work and clear and organized thinking, and that a B is a “good” grade. Here is a general rubric for what I think a grade should mean: A = outstanding work, especially clear presentation containing novel insights and incorporation of outside material; B = good work, mastery of ideas that are clearly presented; C = acceptable work, main concepts are understood with coherent explanations; D = honest attempt to do the work, but severe deficiencies in understanding concepts and expressing ideas; F = incomplete work and failure to address requirements of assignments. I do not grade on a curve, which means everyone could receive an A in my course. When assigning grades I will look for natural breaks between groups of students to help determine where grade cut-offs should occur. That said, if you score the following percentages you are guaranteed the following grades: 90% = A, 80% = B, 70% = C, 60% = D, and 50% = F.

<table>
<thead>
<tr>
<th>Assignments</th>
<th>Points</th>
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<tbody>
<tr>
<td>Exams (3 @ 50 pts each)</td>
<td>150</td>
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<tr>
<td>Group journal clubs (2 @ 15 pts each)</td>
<td>30</td>
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<tr>
<td>Individual journal clubs (2 @ 20 pts each)</td>
<td>40</td>
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<tr>
<td>Group review papers (2 @ 20 pts each)</td>
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<tr>
<td>Individual synthesis papers (2 @ 30 pts each)</td>
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<td>Annotated bibliography</td>
<td>25</td>
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<td>Final paper</td>
<td>75</td>
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<td>Final seminar</td>
<td>25</td>
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<td>Class participation</td>
<td>75</td>
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<tr>
<td>Miscellaneous assignments</td>
<td>50</td>
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<td><strong>Total</strong></td>
<td><strong>550</strong></td>
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**Attendance Policy:**

You are required to attend all lectures. This is a discussion based course and it will not work without full participation from you! *Out of respect for me and your fellow students, turn off all electric devices (cell phones, pda’s, Droid, Ipad, Iphone, Itouch, etc.).* Laptops are not permitted in class unless you sign a contract with me on how your computer will be used in class. Only official College excused absences will be allowed.

**Late Assignment Policy:**

Assignments turned in late will have 15% of their total available points deducted for each day they are late. If it is due in class and you turn it in the same day, but after class, it will be a 5% deduction in points. I work my hardest to return all your assignments to you in a timely manner, which is much easier when you turn your assignments into me on time.
Academic Integrity:

I have a zero tolerance policy regarding plagiarism and academic misconduct. You are responsible for being familiar with rules and policies concerning plagiarism and academic honesty at Lake Forest College (http://www.lakeforest.edu/academics/resources/writingcenter/honesty.php). The work you turn in needs to be the sole product of your effort, unless specifically instructed otherwise. Academic misconduct [defined as 1) all forms of cheating wherever committed, including, but not limited to, plagiarism, giving or receiving aid on an exam or quiz, copying another student’s exam, term paper, report, problem, or laboratory report, 2) theft of examinations and / or exam answers, etc., and 3) receipt of stolen exams or exam answers, etc.] will result in an automatic 0 for the assignment, and in a report to the academic honesty judicial board. Please see your student handbook for a further discussion of this topic.

Policy on Disabilities:

If you have a disability, please notify me at the beginning of the semester and provide me with documentation from LFC Student Services. I will make every effort to accommodate your needs!