

APPLIED ECOLOGY – EVPP/BIOL 377 – Fall 2019  
Lecture: Tuesday/Thursday, 12-1.15pm in Lecture Hall 1

Instructor: Dr. Joris L. van der Ham, E-mail: [jvanderh@gmu.edu](mailto:jvanderh@gmu.edu)  
Office hours: Monday 10-2pm (appointments preferred), David King Hall 3001/3037

**Course objectives**

- Students reinforce their understanding of ecology
- Students learn how human impact on the environment is studied, managed, and mitigated
- Students learn to think critically about the interpretation of ecological data
- Students practice their comprehensive reading skills of scientific literature and their ability to analyze the application of the scientific method in scientific literature

**Textbook: recommended, but not required**

Applied Ecology: monitoring, managing, and conserving. Goodenough and Hart. Oxford University Press

**iClicker: required**

Both quizzes and class participation require students to use iClickers ([iclicker.com](http://iclicker.com)). Any of the handheld remote models or the iphone/android phone app (iClicker Reef) work.

**Blackboard: required**

Homework assignments, course documents, grades are all posted on Blackboard ([mymason.gmu.edu](http://mymason.gmu.edu)).

**Exams**

Students' understanding of the lecture material is tested in two mid-term and one final exam. The lecture exams consist out of typical closed book multiple choice, fill-in-the-blank, true/false questions. Make-up exams are not given unless arranged in advance. The final lecture exam is comprehensive (cover all the material from the entire semester). All the exam material is discussed during lecture.

**Homework assignments**

During the semester each student completes three homework assignments. For these assignments, students read a provided scientific paper in Applied Ecology and analyze how the authors applied the scientific method. Late submissions are accepted, but one letter grade is subtracted for each day late. Lowest score for homework assignments is 50%. The average score of homework assignments represents 25% of the final grade.

**iClicker quizzes**

Six iClicker quizzes (open book and notes) are held during the semester that test students on previously covered course material. For each student, the two lowest iClicker quiz grades are dropped at the end of the semester. No make-up quizzes are offered. Lowest score for iClicker quizzes is 50%. The average score of the iClicker quizzes represents 25% of the final grade.

### **Participation**

In-class questions are asked during lectures and students respond using their iClickers. Grading will be based on participation only, not on the correctness of your answer. Total participation represents 5 bonus points (half a letter grade) added to the final grade.

### **Grading Rubric**

|                      |                   |
|----------------------|-------------------|
| First mid-term exam  | 15 points         |
| Second mid-term exam | 15 points         |
| Final Lecture Exam   | 20 points         |
| Homework             | 25 points         |
| iClicker quizzes     | 25 points         |
| <b>TOTAL</b>         | <b>100 points</b> |
| Participation        | 5 points          |

**100-97% A+; 96-93% A; 92-90% A-; 89-87% B+; 86-83% B; 82-80% B-; etc.**

**Lecture schedule** – this schedule is tentative and is likely to change.

| Week | Tue/Thurs | Topic                | Chapter | Homework (due F) |
|------|-----------|----------------------|---------|------------------|
| 1    | Aug 27    | Introductions        | 1       |                  |
|      | Aug 29    | Monitoring           | 3       |                  |
| 2    | Sept 3    | Monitoring           | 3       |                  |
|      | Sept 5    | Indicators           | 4       | Group 1          |
| 3    | Sept 10   | Indicators           | 4       |                  |
|      | Sept 12   | Indicators           | 4       |                  |
| 4    | Sept 17   | Bioremediation       | 6       |                  |
|      | Sept 19   | Bioremediation       | 6       | Group 2          |
| 5    | Sept 24   | Review               | 1-4, 6  |                  |
|      | Sept 26   | Mid-term exam I      | 1-4, 6  |                  |
| 6    | Oct 1     | Landscape processes  | 7       |                  |
|      | Oct 3     | Landscape processes  | 7       | Group 3          |
| 7    | Oct 8     | Landscape processes  | 7       |                  |
|      | Oct 10    | Invasive species     | 8       |                  |
| 8    | Oct 15    | No class             | -       |                  |
|      | Oct 17    | Invasive species     | 8       | Group 1          |
| 9    | Oct 22    | Pest management      | 9       |                  |
|      | Oct 24    | Pest management      | 9       |                  |
| 10   | Oct 29    | Impact Assessment    | 5       |                  |
|      | Oct 31    | Impact Assessment    | 5       | Group 2          |
| 11   | Nov 5     | Review               | 5, 7-9  |                  |
|      | Nov 7     | Mid-term exam II     | 5, 7-9  |                  |
| 12   | Nov 12    | Conservation         | 10-12   |                  |
|      | Nov 14    | Conservation         | 10-12   | Group 3          |
| 13   | Nov 19    | Conservation         | 10-12   |                  |
|      | Nov 21    | Re-introductions     | 13      | Group 1          |
| 14   | Nov 26    | Re-introductions     | 13      |                  |
|      | Nov 28    | No class             | -       |                  |
| 15   | Dec 3     | Catch up             | -       |                  |
|      | Dec 5     | Review               | 10-13   | Group 2,3        |
| 16   | Dec 12    | Final Exam - 10.30am | 1-13    |                  |

### **Academic Integrity**

Mason is an Honor Code university; please see the Office for Academic Integrity for a full description of the code and the honor committee process. The principle of academic integrity is taken very seriously and violations are treated gravely. What does academic integrity mean in this course? Essentially this: when you are responsible for a task, you will perform that task. When you rely on someone else's work in an aspect of the performance of that task, you will give full credit in the proper, accepted form. Another aspect of academic integrity is the free play of ideas. Vigorous discussion and debate are encouraged in this course, with the firm expectation that all aspects of the class will be conducted with civility and respect for differing ideas, perspectives, and traditions. When in doubt (of any kind) please ask for guidance and clarification.

### **Disability Accommodations**

If you have a documented learning disability or other condition that may affect academic performance you should: 1) make sure this documentation is on file with Disability Services (SUB I, Rm. 4205; 993-2474; <http://ds.gmu.edu>) to determine the accommodations you need; and 2) talk with me to discuss your accommodation needs.

### **Sexual Harassment, Sexual Misconduct, and Interpersonal Violence**

George Mason University is committed to providing a learning, living and working environment that is free from discrimination and a campus that is free of sexual misconduct and other acts of interpersonal violence in order to promote community well-being and student success. We encourage students who believe that they have been sexually harassed, assaulted or subjected to sexual misconduct to seek assistance and support. University Policy 1202: Sexual Harassment and Misconduct speaks to the specifics of Mason's process, the resources, and the options available to students.

Notice of mandatory reporting of sexual assault, interpersonal violence, and stalking: As a faculty member, I am designated as a "Responsible Employee," and must report all disclosures of sexual assault, interpersonal violence, and stalking to Mason's Title IX Coordinator per University Policy 1412. You may seek assistance from Mason's Title IX Coordinator, Jennifer Hammat (703-993-8730) or by email [cde@gmu.edu](mailto:cde@gmu.edu). **If you wish to speak with someone confidentially, please contact one of Mason's confidential resources, such as Student Support and Advocacy Center (SSAC) at 703-993-3686 or Counseling and Psychology Services (CAPS) at 703-993-2380. The 24-hour Sexual and Intimate Partner Violence Crisis Line for Mason is 703-380-1434.**

### **Privacy**

The use of Blackboard is *required* for this class. You can log in using your GMU username and password at <http://mymason.gmu.edu>. I use Blackboard to post lecture slides, grades, homework assignments, etc. Please use your MasonLive email account to receive communications related to this class. I will not respond to messages sent from or send messages to a non-Mason email address.

### **Undergraduate Course Repetition**

There is no limit on the number of graded attempts for this course, but this course may not be repeated for credit. Please see AP. 1.3.4 in the University Catalog and consult with your academic advisor if you have any questions.