Course Syllabus

EVPP 377: APPLIED ECOLOGY

Class Information

EVPP 377:	**Applied Ecology**
Section:	DL1 (100% online)
Credits:	3
Prerequisites	None
Semester:	Summer C

Instructor Information

Instructor: A. Alonso Aguirre, DVM, PhD
Professor and Department Chair
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Instructor/Student Communication

Email Communication. Per university policy, I am only allowed to communicate with students using GMU.EDU email accounts.

Blackboard. All course-related announcements and emails for this course will be sent through Blackboard. If you have a question or a concern about the course, email me using the mail feature in Blackboard. Students should check Blackboard and their e-mail daily. Failure on your part to check Blackboard and e-mail on a regular basis is not an excuse for missed /late assignments or exams. I will respond to e-mails with respond to emails 48 hours upon receipt, Monday through Friday.

Personal Questions or Concerns - If you have personal concerns or an emergency, please contact me directly at aaguirr3@gmu.edu. I am available for in person meetings by appointment.

Ask the Professor – Ask the Professor is a discussion forum for asking me questions about the course that may be on interest to the entire class. If you have questions about a lecture or the project please use "Ask the Professor", so that your classmates can benefit from my response. There is a tab linking to the forum on the left side of the course blackboard page. You can also access this from the discussion tab. **Please allow up to 48 hours for a response to an email.**

Course Description

This course will introduce you to ecosystem concepts and applications to natural and managed ecosystems. This course will discuss the natural environment, ecological processes, and human interaction with and management of this environment. Humankind plays a major role in all worldwide ecosystems and there is very little, if any, of the surface of this planet that remains untouched by human actions. This course assumes that students have a general understanding of environmental science, ecology or biology. The class will focus on numerous environments, anthropogenic impacts, and what can be done to minimize those impacts using ecological health, environmental management and public policies.

Course Objectives

Upon completion of the course, students will be able to:

1) Identify and explain core fundamental principles of applied ecology
2) Learn how human impact on the environment can be studied, managed, and mitigated
3) Apply critical thinking about the interpretation of ecological data
4) Practice comprehensive reading skills of scientific literature and ability to analyze the application of the scientific method
5) Convey to a non-scientist, in both written and verbal forms, basic ecological principles and how they relate to real-world environmental issues

The Online Learning Environment

It is important that you become familiar with this syllabus, the course requirements, all course policies, and how to navigate in Blackboard including within the online structure unique to this course. Since we do not meet in a classroom, I am not able to provide daily reminders of impending due dates for assignments, and projects. **This is your responsibility.**

Learning Modules - This course is organized into Course Content Modules. Included in these modules are: 1) learning objectives, 2) an overview of the topic and elaboration on concepts (when appropriate), 3) lecture material, 4) reading material, 5) and descriptions of any activity or assignment that you need to complete. Modules will only be available for about a one-week window, so you must keep up with the material. All course materials are available on Blackboard. Classes will be split up into 4 modules based on topic area, with recorded lecture notes and assignments related to covered material and applied ecology articles.

Course Content

All course materials will be available through Blackboard (e.g., syllabus, video lectures, lecture outlines, selected readings, references, and guidelines for activities, assignments, and exercises).

Required Textbook – Applied Ecology. 2018. The Open University of Hong Kong. Wikibooks
https://en.wikibooks.org/wiki/Applied_Ecology

Recommended textbook - Goodenough A.E. and A.G. Hart. 2018. Applied Ecology: Monitoring, managing, and conserving. Oxford University Press, New York, 413 pp.

Assignments and Grading

The total grade received for this course will be based on the following assignments and assessments:

Applied Ecology Article Discussion Posts (40%)
Each student will be required to write a 100-150-word post, following the discussion guidelines of the articles assigned to each class. The highest 8 scores will be used for your final grade. Keep up with the readings and you should have no issues. Discussion posts are due on Wednesday & Friday of each week by 12:00 noon.

Video summaries of "*Earth a New Wild*" (20%)
Each student will be required to write 400-word summaries of the 5 videos to be watched during the lectures. The lowest score will be dropped. These summaries are due every Monday by 12:00 noon.

Quizzes (20%)
Four quizzes will be given throughout the course (about one a week). These will be timed, but not be cumulative, and made up of multiple choice, short answer, fill in the blank, matching, definitions, and True/False. General questions about an article or video will be fair game. Quizzes will be timed and open notes, a curve will be assigned depending on overall scores, discussing the quiz or sharing information about it is prohibited.

Final Exam (20%)
Final exam will be team-based and open book. You will be randomly assigned to a team of 4 students to solve these questions that are/were actual/real cases. You must answer all research questions as a team; therefore, all members of the team should agree on the output, the solutions and answers you submit. **Remember: Together as a team you will receive the same grade.**

Late submissions policy
No homework will be accepted after the due date. This means you may NOT turn in any assignments late. All late homework receives an automatic grade of "0". Please note that it is **mathematically impossible to earn an "A" in this class unless you complete** the majority of the homework**.**

Assessment

Activity	Points	% to Total Grade
Article Discussion Posts (8x50 points)	400	40%
Video Summaries (4 x 50 points)	200	20%
Quizzes (4 x 50 points)	200	20%
Final Exam (200 points)	200	20%
TOTAL	**1000**	**100%**

Posting of Grades - Students assignments will be evaluated and posted to Blackboard within two weeks, after the assignment due date.

Grading Scale

Percentage	Grade
98-100%	A+
93-97%	A
90-92%	A-
88-89%	B+
83-87%	B
80-82%	B-
78-79%	C+
70-77%	C
60-69%	D
Below 59%	F

Late Assignments, Make-up Policy

If an emergency occurs before the quiz/exam, **you must contact me within 24 hours of the exam and must have the proper documentation for the absence**. If you know that you will be missing an exam ahead of time, you must speak with me **at least one week before** the exam date. There will be no make-up exams for students who fail to follow this policy. Missed exams will result in a "0".

Course Schedule

Class	Date	Topic	Assignment Due
1	July 6	1- Introduction to course, objectives, syllabus, grading	
		2- Why Applied Ecology?	
2	July 8	3- The Scientific Method	Cadotte et al. 2017
		4- Video: *Earth a New Wild -Home*	
3	July 10	5- Population & Global Environmental Change	Tingley et al. 2013
		6- Human Ecological Footprint Exercise	Trevors 2010
		7- Video: *Planet Earth: Into the Wilderness*	
4	July 13	8- Ecology and Management of Marine Ecosystems	Aguirre & Weber 2011
5	July 15	9- Case study: The lionfish invasion. *D. Valderrama*	
		10- Video: *Earth A New Wild – Oceans*	
6	July 17	11- Plants on Fire: The Good, the Bad, and the Invasive	Cramer et al. 2008
7	July 20	13- Ecology and Management of Forests	Mori et al. 2017
		14- Video: *Earth a New Wild – Forests*	
8	July 22	15- Ecological Health Assessment & Sentinel Species	Aguirre & Tabor 2004
			Tabor & Aguirre 2004
9	July 24	16- *Sorta situ*: Managing Species & Ecosystems	Wolfe et al. 2012
		Written Assignment due	
10	July 27	17- Potomac River Ecology & Management. *C. Jones*	Bricker et al. 2014
11	July 29	20- Methods of Freshwater Ecology	Jones et al. 2016
12	July 31	***Take Home Final Exam Given***	
13	Aug 3	22- Ecology and Management of Pollinators *G. Perilla*	Tylianakis 2013
			Perilla 2016
14	Aug 5	24- Ecology and Management of Wetlands	Hagy et al. 2017
		Take Home Final Exam Due	

NOTE: This is a tentative course schedule that is subject to CHANGE. You should be aware that dates for certain lecture materials could change or new lecture materials could be added. If such changes do occur they will be discussed in class prior to the actual change.

Expectations for Instructor

You can expect me to be available to help you with course assignments, readings, or any other aspect of the course. You can expect me to promptly respond to your emails during normal working hours. Although I often check my email in the evening and on the weekends, you should not rely on a response from me during these times.

You can expect me to provide timely and detailed feedback on your course assignments. You can expect me to create an inclusive classroom environment that respects the diverse perspectives offered by each of you.

Expectations for Students

Minimum Technology Requirements - Students are required to have access to a computer that can access all functions on Blackboard, including videos, a compatible web browser, a reliable high-speed Internet connection, and word processing and presentation software. Visit [Mason Online](#) to view Minimum Hardware/Software requirements and to view a list of [supported browsers and operating systems.](#)

Minimum Student Technical Skills - Students should (1) be familiar and regularly use a computer network, (2) be able to access the Universities Learning Management System LMS (Blackboard), (3) be able to send and receive messages via electronic mail (e-mail), and (4) be able to upload and download computer files with ease.

Academic Honesty - George Mason University requires all members of its community to be honest in all their endeavors. As a member of the Mason community, students pledge on their honor to neither give nor receive unauthorized aid while working or completing assignments and examinations. Any individual who becomes aware of a violation of the Mason Honor Code is bound by honor to take corrective action. For more information, visit the [Mason Honor Code](#) website.

Activities, Assignments, and Exercises - Students are expected to do their own work. It is a good idea to make multiple back-up copies of your work. Major assignments will not be returned. All assignments must be completed in accordance with their respective guidelines.

Netiquette - Please use professional language in all course communications, including emails and discussion board posts. Use correct punctuation, avoid abbreviations, and follow all other rules of formal writing. Be respectful of others in your posts and responses.

Commercial Sale of Course Lectures - The content presented in the class is the property of the instructor and GMU and may not be duplicated in any format without permission from the instructor, and may not be used for any commercial purposes. Students violating this policy may be subject to discipline under the GMU Conduct Code.

Student Support

Special Accommodations - If you anticipate barriers related to the format or requirements of this course; please let the instructor know as soon as possible. If disability related accommodations are necessary (for example, extended time on exams, captioning), please register with the Office of Disability Services, (703) 993-2474), and then notify me of your eligibility for reasonable accommodations.

Distance Education Library Services –Students enrolled in online courses at Mason have 24/7 access to licensed full text databases that allow you to search for articles from thousands of scholarly journals, newspapers, reference materials, e-books, and popular magazines. Visit the Distance Education Library Services website for details.

Online Writing Lab (OWL) - In addition to face-to-face tutoring, the Writing Center offers the Online Writing Lab (OWL). With this resource, you can email your paper to a tutor and get feedback almost immediately. Visit Mason Online for details.

Software Tutorials – An online subscription library, lynda.gmu.edu offers more than 2,000 tutorial videos on a range of topics such video production, developing effective presentations, excel training, and resume writing. For more information go to GMU's Lynda.com website. Links are provided through Blackboard for additional tutorials.

Technical Assistance

- GMU's Course Support website provides technical information about how to use Blackboard. The GMU College of Health and Human Services also provides tools for online learners, including links to software downloads and contact information for technical support.
- If you are unable to logon to Blackboard, check Mason's Alerts & Outages page to see if the lack of access is campus wide. There are often planned outages on Sunday mornings.
- **The professor is not able to provide technical support.** Questions about technical information should be directed to the IT experts listed below.

ITS Support Center - If you cannot log into Blackboard Courses, contact the ITS Support Center at 703-993-8870. For questions and comments regarding the Blackboard Courses system, please email courses@gmu.edu