



BSC 560 Landscape Ecology

I. General Information

Course syllabus: Summer I 2020

Credits: 3 sch

Instructor of record: Johanna Delgado Acevedo, Ph.D.

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Book: Turner, M.G. and Gardner, R.H. 2015. Landscape Ecology in Theory and Practice: Patterns and Process. 2nd edition. Springer Business and Media LLC, New York, USA.

ISBN 978-1-4939-2793-7 ISBN 978-1-4939-2794-4 (eBook)

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II. Course Description

This course is designed to provide an overview of the relationships between ecological processes in the environment and particular ecosystems using a variety of landscape scales, development of spatial patterns, and organizational levels of research and policy.

III. Student Learning Objectives

To understand relationships between ecological processes at different scales.

To understand data gathered for sampling methods at the landscape level.

To develop a reading tradition.

To develop communication skills and clarity to present ideas.

IV. Learning strategies

Reading assignments

Analysis of scientific literature

Individual work, analysis of free reading

Written synthesis of information

V. Assumptions, Expectations, Philosophy

University students are a select group of students soon to be professionals.

Instructors can have high expectations of student performance.

Demanding courses benefit students more than easy courses.

Assignments are due on time unless you have made a prior arrangement with me (only granted for unusual or extenuating circumstances and in case of health issues proper medical excuse is required).

Reading and assimilating information is a critical part of your current and continuing education. This will help you become a better writer, a more rounded



individual, and expose you to subjects outside of your immediate knowledge

VI. Tentative schedule

| Date | Topic |
|--------|--|
| WEEK 1 | Introduction to Landscape Ecology and Scale Causes of Landscape Patterns |
| WEEK 2 | Introduction to Models Landscape Metrics |
| WEEK 3 | Spatial Statistics Landscape Disturbance Dynamics |
| WEEK 4 | Organisms and Landscape Patterns |
| WEEK 5 | Ecosystems Processes and Heterogeneous Landscapes Landscape Dynamics in a rapidly Changing World Conclusions and Future Directions |

VII. Course Requirement and Evaluation Method

Assignments, quizzes, and research paper are required. I encourage student contribution to the overall progress of the group. I encourage interactive participation even though is an online class. It is necessary that students have a professional and ethical behavior through the entire course.

Homework, quizzes, exams, concept implementation project and term paper are required.

It is necessary that students have a professional and ethical behavior through the entire course.

Grade basis:

10 chapter summaries (200 points)

5 assignments (50 points)

1 research project (60)

Total 610 points

Penalty enforcement (I reserve the right to adjust your grade for violation of the minimum expectations).

Make-up quizzes will only be given if arrangements are made with the instructor before missing the scheduled quiz. A documented excuse will be required.

Otherwise, missing quizzes will be counted as zeroes in the overall grade computation.

Grading Scale:

90.0 - 100% = A

80.0 - 89.9% = B

70.0 - 79.9% = C



60.0 – 69.9% = D

<60.0% = F

Chapter summaries (10)

For each chapter summary, you will summarize the information contained in each book chapter. Try to synthesize the information and make connection among topics within the chapter. It should be a narrative not an outline of the chapter. Read the chapter, take notes and then write about it. Each summary should be at least 800-1000 words. These are the chapters. On that date, provide me a summary in the assigned dropbox.

Assignments (5)

Journal articles

Reading and assimilating information is a critical part of your current and continuing education. For each assign date, a journal is named in the right column of the table, choose and read a paper from that journal that you find interesting or relevant. These journals are available in our library (online resources). On that date, provide me a citation and a short description of the paper (10 sentences). Each summary will follow the format of The Journal of Wildlife Management.

| Date | Journal |
|--------|------------------------------|
| WEEK 1 | Journal of Landscape Ecology |
| WEEK 2 | Landscape and Urban Planning |
| WEEK 3 | Journal of Applied Ecology |
| WEEK 4 | Ecology |
| WEEK 5 | Journal of Landscape Ecology |

Research project and presentation:

You will develop a research project (literature review) on a specific technique or set of techniques in Landscape Ecology. You should include an introduction, methodologies used to study your topic, results, and discussion. The research project will have at least 2,500 words including references. The project will be due the last day of class. You will present your research project in a 5-minutes video presentation and submit it in the assigned dropbox along with the written part.

VIII. Course and University and Policies

Responsible Use of Technology — It is expected that all students will only use cellphones, PDAs, laptop computers, MP3 players and other technology outside of class time or when appropriate in class. Answering a cell phone, texting, listening to music or using a laptop computer for matters unrelated to the course may be grounds for dismissal from class and/or other penalties. Students are not allowed to use image, video, nor audio recording devices of any kind



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during class time without prior consent of the instructor.

University Specific Procedures:

ADA Statement-Students with Disabilities:

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services Texas A&M-Commerce
Gee Library
Room 132
Phone (903) 886-5150 or (903) 886-5835
Fax (903) 468-8148
StudentDisabilityServices@tamuc.edu

Nondiscrimination Notice

Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment.

Campus Concealed Carry - Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations. For a list of locations, please refer to (<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf>) and/or consult your event organizer). Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.