



PLG 472/572: Environmental Land Use Planning

Tuesday: 10:30AM – 11:45PM

Thursday: 12:30PM – 1:45PM

Architecture, Room 200

Instructor: Dr. Shujuan Li

Email: shujuanli@email.arizona.edu

Office Hours: As needed by appointment

Office Location: Architecture 316

Description of Course

This course focuses on the complex linkages between human land-use activities and natural systems. Environmental planning utilizes methodologies which are systematic, iterative, and transparent and relies on integrating a wide spectrum of contemporary environmental issues in order to achieve more sustainable land use outcomes. As an interdisciplinary course, it draws from the fields of planning, geography, design, land use law, public policy, economics, natural science, and engineering among others.

This course aims to equip students with a broad knowledgebase on environmental issues of land development and environment management methods. Further, students will develop the necessary land-use analysis and planning skills in order to help guide land-use decision making, engage stakeholders, and minimize/mitigate conflicts between natural and built systems in an effort to produce more sustainable land-use patterns and plans.

Course Prerequisites or Co-requisites

This class is intended for upper-level class undergraduate and graduate students, and course admittance resides solely with the instructor. There are no prerequisite courses for enrolling in this course. All majors and disciplines are strongly encouraged to enroll. The course is interdisciplinary in nature and will benefit from having a diverse group of participants.

This course is intended to be followed by PLG 580 (Environmental Spatial Analysis) in the spring semester. However, subsequent enrollment in PLG 580 is not required for non-PLG students.

Course Format and Teaching Methods

This course will utilize a combination of lectures, discussions, and readings in order to cover a broad spectrum of topics. Student contributions and involvement are paramount to the success of this course. As the course relies on student initiatives and interests, students are encouraged to share their own experiences, their understanding of the course materials, and constructive commentaries with the class.

As a web-enhanced class, it is the responsibility of students to engage the course D2L website frequently for supplemental reading materials. These materials will be covered in class, as well as be accessed in quizzes or exams.

Course Objectives

The objectives of this course are to:

- 1) Develop an understanding of a broad spectrum of natural factors and processes and their relationships to land-use and development patterns.
- 2) Utilize methodologies and techniques central to land analysis.
- 3) Explore and develop an understanding of existing strategies to mitigate the environmental impacts as a result of land-use decisions and development.
- 4) Demonstrate the ability to apply principles of environmentally sensitive land use planning, design, development and decision making within land-use planning process.
- 5) Develop an understanding of applying policies and programs to control land-use impacts and to protect and restore environmental resources.

Absence and Class Participation Policy

The UA's policy concerning Class Attendance, Participation, and Administrative Drops is available at: <http://catalog.arizona.edu/policy/class-attendance-participation-and-administrative-drop>

The UA policy regarding absences for any sincerely held religious belief, observance or practice will be accommodated where reasonable, <http://policy.arizona.edu/human-resources/religious-accommodation-policy>.

Absences pre-approved by the UA Dean of Students (or Dean Designee) will be honored. See: <https://deanofstudents.arizona.edu/absences>

Participating in the course and attending lectures and other course events are vital to the learning process. As such, attendance is required at all lectures and discussion section meetings. Students who miss class due to illness or emergency are required to bring documentation from their health-care provider or other relevant, professional third parties. Failure to submit third-party documentation will result in unexcused absences.

Required Texts or Readings

Randolph, J. 2012. Environmental land use planning and management (Third Edition). 2012. Island Press, Washington, DC. ISBN: 978-1597267304. (Required)

Required or Special Materials

Flash drive or hard drive with storage capacity of 10 gigabits or above.

Assignments and Examinations: Schedule/Due Dates

There are three assignments for undergraduate and graduate students. A report is required for each assignment. Graduate students are also required to present the study results for each assignment. The presentation dates are listed in the schedule below. Graduate students will be given an additional assignment on land-use planning studies. Detailed instructions and requirements of the assignments will be given in the semester.

In addition, there will be pop quizzes, mid-term exam, and final exam. The final exam is scheduled on December 12, 2017.

<https://www.registrar.arizona.edu/courses/final-examination-regulations-and-information>

Grading Scale and Policies

Grading is based on the following scale:

90-100	=	A
80-89	=	B
70-79	=	C
60-69	=	D
<60	=	E

Your course grade will be assigned according to the following scheme:

	Undergrad	Grad
Attitude, Attendance & Preparedness	10%	10%
Quizzes	10%	10%
Assignments	40%	50%
Mid-Term Exam	20%	15%
Final Exam	20%	15%
Total	100%	100%

Requests for incomplete (I) or withdrawal (W) must be made in accordance with University policies, which are available at <http://catalog.arizona.edu/policy/grades-and-grading-system#incomplete> and <http://catalog.arizona.edu/policy/grades-and-grading-system#Withdrawal> respectively.

Tentative Class Schedule and Topics

Week 1

Topic 1—An Introduction

- (August 22) Lecture 01—Introduction of the syllabus
- (August 24) Lecture 02—Land use changes

Week 2

Topic 2—An Introduction of Environmental Management and Planning

- (August 29) Lecture 03—Environmental management
- (August 31) Lecture 04—Environmental planning

Week 3

Topic 3—Land Use Planning

- (September 5) Lecture 05—Land use planning
- (September 7) Graduate students presentation on Assignment 1

Week 4

Topic 4—Land Development and Conservation

- (September 12) Lecture 06—Land use development
- (September 14) Lecture 07—Land conservation

Week 5

Topic 5—Government Management

- (September 19) Lecture 08—Local government management
- (September 21) Lecture 09—Regional, state and federal management

Week 6

Topic 6—Emerging Approaches in Land Management

- (September 26) Lecture 10—Collaborative management and public participation
- (September 28) Lecture 11—Ecosystem and watershed management

Week 7

Topic 7 - Natural Hazard Mitigation

- (October 3) Lecture 12— Natural hazard mitigation
- (October 5) Graduate students presentation on assignment 2

Week 8

Topic 8 - Geospatial Data and GIS

- (October 10) Lecture 13—Mid-term Exam
- (October 12) Lecture 14— Geospatial Data and GIS

Week 9

Topic 9— Soil, Topography, and Land Use

- (October 17) Lecture 13—Soils, Topography
- (October 19) Lecture 13—Agricultural Land Use

Week 10

Topic 10— Land Use and Surface Water

- (October 24) Lecture 15—Land use, stream flow, and runoff pollution
- (October 26) Lecture 16—Stormwater management and stream restoration

Week 11

Topic 11 - Land Use and Ground Water

- (October 31) Lecture 17—Land use and ground water

- (November 2) Lecture 18— Landscape ecology, urban forestry, and wetlands

Week 12

Topic 12 – Land Use and Ecosystems

- (November 7) Lecture 19— Land use, wildlife habitats, and biodiversity
- (November 9) Graduate students presentation on Assignment 3

Week 13

Topic 13 –Spatial Analysis and Modelling in Land Use Planning

- (November 14) Lecture 19— Spatial analysis using GIS in land use planning
- (November 16) Lecture 19— Modeling with GIS in land use planning

Week 14

Topic 14 –Scenarios/Alternative Studies in Land Use Planning

- (November 21) Lecture 19— Scenarios/alternative studies in land use planning
- (November 23) No class, Thanksgiving.

Week 15

Topic 15 –Integration Methods in Land Use Planning

- (November 28) Lecture 19— Integration methods in land use planning
- (November 30) Lecture 19— Graduate students presentation on Assignment 4

Week 16

- (December 5) Final exam review
- (December 7) Reading day, no class

Week 17

- (December 12) Final exam (10:30AM – 11:45AM)

Classroom Behavior Policy

To foster a positive learning environment, students and instructors have a shared responsibility. We want a safe, welcoming, and inclusive environment where all of us feel comfortable with each other and where we can challenge ourselves to succeed. To that end, our focus is on the tasks at hand and not on extraneous activities (e.g., texting, chatting, reading a newspaper, making phone calls, web surfing, etc.).

Students are asked to refrain from disruptive conversations with people sitting around them during lecture. Students observed engaging in disruptive activity will be asked to cease this behavior. Those who continue to disrupt the class will be asked to leave lecture or discussion and may be reported to the Dean of Students.

Threatening Behavior Policy

The UA Threatening Behavior by Students Policy prohibits threats of physical harm to any member of the University community, including to oneself. See <http://policy.arizona.edu/education-and-student-affairs/threatening-behavior-students>.

Accessibility and Accommodations

Our goal in this classroom is that learning experiences be as accessible as possible. If you anticipate or experience physical or academic barriers based on disability, please let me know immediately so that we can discuss options. You are also welcome to contact the Disability Resource Center (520-621-3268) to establish reasonable accommodations. For additional information on the Disability Resource Center and reasonable accommodations, please visit <http://drc.arizona.edu>.

If you have reasonable accommodations, please plan to meet with me by appointment or during office hours to discuss accommodations and how my course requirements and activities may impact your ability to fully participate.

Please be aware that the accessible table and chairs in this room should remain available for students who find that standard classroom seating is not usable.

Code of Academic Integrity

Students are encouraged to share intellectual views and discuss freely the principles and applications of course materials. However, graded work/exercises must be the product of independent effort unless otherwise instructed. Students are expected to adhere to the UA Code of Academic Integrity as described in the UA General Catalog. See:

<http://deanofstudents.arizona.edu/academic-integrity/students/academic-integrity>.

The University Libraries have some excellent tips for avoiding plagiarism, available at

<http://new.library.arizona.edu/research/citing/plagiarism>.

Selling class notes and/or other course materials to other students or to a third party for resale is not permitted without the instructor's express written consent. Violations to this and other course rules are subject to the Code of Academic Integrity and may result in course sanctions.

Additionally, students who use D2L or UA e-mail to sell or buy these copyrighted materials are subject to Code of Conduct Violations for misuse of student e-mail addresses. This conduct may also constitute copyright infringement.

UA Nondiscrimination and Anti-harassment Policy

The University is committed to creating and maintaining an environment free of discrimination; see <http://policy.arizona.edu/human-resources/nondiscrimination-and-anti-harassment-policy>

Our classroom is a place where everyone is encouraged to express well-formed opinions and their reasons for those opinions. We also want to create a tolerant and open environment where such opinions can be expressed without resorting to bullying or discrimination of others.

Additional Resources for Students

UA Academic policies and procedures are available at <http://catalog.arizona.edu/policies>

Student Assistance and Advocacy information is available at

<http://deanofstudents.arizona.edu/student-assistance/students/student-assistance>

Confidentiality of Student Records

<http://www.registrar.arizona.edu/personal-information/family-educational-rights-and-privacy-act-1974-ferpa?topic=ferpa>

Subject to Change Statement

Information contained in the course syllabus, other than the grade and absence policy, may be subject to change with advance notice, as deemed appropriate by the instructor.

Acknowledgement

This syllabus is developed based on a previous syllabus of this course, taught by Dr. Ryan Perkl.