

## [GEODZ 826] GeoDesign Models III: Change and Representation

Fall 2018

**Course URL:** <https://psu.instructure.com/courses/1900280>

**Course Instructor:** Mintai Kim / mxk805@psu.edu

**Instructor Office Hours:** by appointment

### Prerequisites

GEODZ 511, GEODZ 822

## Course Description

This course examines two geodesign models – representation and change – while building on curricula from GEODZ 511 and GEODZ 822. Representation models focus on communicating key concepts. Change models focus on investigating how changes in the landscape may alter the study area. This course assumes the students have a working familiarity with the basic concepts of geodesign, GIS operability, evaluation and decision-making frameworks, and scientific process.

In summary, this course provides a deep investigation of design-based concepts and the communication of geographic change.

This course is intended to act as a seminar-based interactive learning environment. The platform for the course will be Canvas (see link above). A typical lesson includes:

- Readings and other media
- A series of critical questions / key ideas
- Assignments and / or peer review

## Required Texts

Texts, articles, etc. will be provided through the course's library reserves:

<http://libraries.psu.edu/services/course-reserves>

## Course Objectives

**By the end of this course, you should be able to:**

- Describe the role and functionality of Representation and Change models as they relate to the geodesign process.
- Determine the appropriate method of representation given the geographic area, audience, and project scope.
- Explain how proposed changes may be analyzed given a geographic area and design problem.
- Understand the relationship between change and impact in a modeled environment.
- Develop the ability to provide and respond to collaborative feedback through the use of synchronous and asynchronous communication methods.

# Course Evaluation

## 40% Lesson Assignments

Course assignments are designed to investigate specific elements of representation and change. Individually assignments do not have significant weight, but each assignment is a critical building block towards the final project. All assignments will be submitted to Canvas.

Evaluation of assignments is based on:

- 30% Comprehension Is it clear that the student understands the material?
  - 30% Application Is the student able to apply the concept(s) to a problem?
  - 30% Articulation Does the student clearly communicate their response?
- Note: this includes spelling, grammar, formatting, etc.*

The remaining 10% of your grade will be awarded for assignments that are submitted complete and on time.

## 40% Class Discussion & Participation

Collaboration is a key part of the geodesign process. Collaboration is an opportunity for students to share ideas and dialogue with their peers. We will be using Canvas as our forum for collaboration and participation. You are expected to contribute regularly (several times a week) to class discussions, respond to questions presented by the instructor, your peer's questions, and by offering insights or questions of your own. Geodesignhub project will be mainly graded on discussion and participation.

Evaluation of discussion and participation is based on:

- 40% Consistency Does the student consistently contribute to the conversation?
- 30% Quality Is the discussion grounded in a theoretical foundation?
- 30% Response Does the student acknowledge and respond to other students?

The remaining 10% of your grade will be awarded for participation conducted in a timely manner.

## 20% Project

Your project represents your depth of knowledge and familiarity with applying change and representation models to a specific area of interest. Your project should both build upon previous work and present a *greater depth of understanding* than lesson assignments. The project will be supported by citations and a bibliography as needed. (Student may use any standard citation method).

At a minimum, the project will:

- Present a clear design statement.
- Describe the critical physical, social, and environmental factors that inform your strategy.
- Describe the application of a change model, including a matrix of factors, a description or diagram of their relationships, and a description or diagram of proposed changes.
- Identify key possible data sources.
- Identify possible methods of representing the study area.
- Supporting maps, photos, diagrams, images.

The project will be evaluated based on:

- 20% Design Is there a clear design-based approach to a problem?
  - 25% Completeness Does the project address all of the necessary concepts?
  - 25% Depth Is it clear that there is a strong understanding of the course objectives?
  - 20% Quality Is the presentation of a high quality with sufficient visual materials?
  - 10% Clarity Is the project clear to understand and free of errors?
- Note: this includes spelling, grammar, formatting, etc.*

## Course Grade

A	90% - 100%
B	80% - 89%
C	70% - 79%
D	60% - 69%
F	< 60%

## Course Calendar

*All assignments should be submitted by midnight on the Sunday following new lesson material. The instructor will generally provide feedback on each assignment within a week of the submission date.*

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
New lesson material available		Peer Review Due  Mid-week instructor check-in of discussion				Assignment Due @ midnight Sunday your local time zone  Student work on lesson assignment / independent research for the project

## Course Delivery Format

This course will be delivered entirely online. There are no face-to-face class sessions. Be sure to go through the Canvas web space thoroughly to prepare yourself for how this course will operate and what is expected of you.

Since this course is offered purely online, our correspondence will mainly take place via the Canvas messaging system. I will be periodically sending announcements through Canvas. I expect all students to check their messages daily so that we are all on the same page. It is the responsibility of each student to stay aware of all class requirements, deadlines, and due dates. Please don't hesitate to message me with any questions or concerns. We will also utilize Zoom and Voice Thread.

## Technical Requirements

Operating System: Windows 7 or higher, Mac OS X 10.2 or higher.

Web browser: Use either Firefox or Safari. Firefox is preferred. Chrome will work but might cause trouble for Canvas. Do not use Internet Explorer.

Adobe Flash Player (Adobe Flash is going away but so many websites are still using it.)

A minimum of 256 Mb of RAM but 4Gb is recommended

Broadband connection is required

Note: Cookies, Java, and JavaScript must be enabled. Pop-up blockers should be configured to permit new windows from Penn State Web sites.

## **Academic Policies**

### **Academic Integrity**

According to the Penn State Principles and University Code of Conduct: Academic integrity is a basic guiding principle for all academic activity at Penn State University, allowing the pursuit of scholarly activity in an open, honest, and responsible manner. In according with the University's Code of Conduct, you must not engage in or tolerate academic dishonesty. This includes, but is not limited to cheating, plagiarism, fabrication of information or citations, facilitating acts of academic dishonesty by others, unauthorized possession of examinations, submitting work of another person, or work previously used without informing the instructor, or tampering with the academic work of other students. Any violation of academic integrity will be investigated, and where warranted, punitive action will be taken. For every incident when a penalty of any kind is assessed, a report must be filed.

### **Affirmative Action & Sexual Harassment**

The Pennsylvania State University is committed to a policy that all persons shall have equal access to programs, facilities, admission, and employment without regard to personal characteristics not related to ability, performance, or qualifications as determined by University policy or by Commonwealth or Federal authorities. Penn State does not discriminate against any person because of age, ancestry, color, disability or handicap, national origin, race, religious creed, sex, sexual orientation, or veteran status. Direct all inquiries to the Affirmative Action Office, 211 Willard Building.

### **An Invitation to Students with Learning Disabilities**

Penn State welcomes students with disabilities into the University's educational programs. If you have a disability-related need for modifications or reasonable accommodations in this course, contact the Office for Disability Services, ODS (located in 116 Boucke Building, 1-814-863-1807 (V/TTY). For further information regarding ODS please visit their web site at: [www.equity.psu.edu/ods](http://www.equity.psu.edu/ods).

Instructors should be notified as early in the semester as possible regarding the need for modification or reasonable accommodations. Since many students have disabilities not readily noticeable this announcement or statement encourages students to identify their needs early in the semester so timely adaptations can be made. You may refer to the Nondiscrimination Policy in the Student Guide to University Policies and Rules.