Pennsylvania State University
World Campus

GEODZ 822: Models I - Evaluation and Decision

Course URL: https://courses.aanda.psu.edu/geodz822/

Course Instructor: David Goldberg [dgoldberg@psu.edu]
Instructor Office Hours: by appointment

Prerequisites: GEODZ 511

Course Description

The Geodesign Framework directs design thinking regarding a specific issue or project as well as determining how best to conduct a specified study. The Framework is comprised of six families of models, which form the basis for a design study's analysis and project approach. In this course you will develop fluency in two of the Framework's families of models: Evaluation and Decision, while understanding how those contribute to the entire Framework methodology.

Following Carl Steinitz's framework for geodesign, you will learn how these two models determine the design method by defining how the decisions are made, and by whom, and what evaluations are necessary in making an informed decision. You will learn that final designs are decision-driven not data-driven. The course teaches you how to ask questions, assess attractiveness, vulnerability, and risks of particular factors in Evaluation models, as they are defined by the cultural, political, and administrative values of the stakeholders in the Decision models, which themselves are defined by the design consequences of Impact models.

You will gain a better understanding of these models by reviewing case studies, engaging in dialogues with colleagues, and by completing weekly assignments. Each week the course material will be communicated through five (5) different methods:
- Topic overview
- Core readings
- Relevant videos
- Weekly assignments
- Yammer class dialogues

Required Texts
- Steinitz, Carl. A Framework for Geodesign: Changing Geography by Design. ESRI Press. 2012.
- Other texts excerpts, articles, etc. will be provided through the Penn State Library Reserves. See: http://www.libraries.psu.edu/psul/reserves.html

Course Objectives

By the end of this course, you should be able to:
- Describe how geodesign studies are *decision*-driven – not *data*-driven.
- Understand the methodologies for performing a geodesign study.
- Assess the goals and values for the "people of the place" in a geodesign study.
- Specify a method for evaluating decision maker criteria in a geodesign study.
- Demonstrate a working knowledge of specific tools for evaluation modeling.
- Assess attractiveness, vulnerability, and risks of particular decision factors.
- Exhibit the role of collaboration in the geodesign process.

Case Project

In GEODZ 511, you worked on an individual geodesign study focusing on your area of interest (AOI). In this course, you will be working on a course case project, not as an individual but as a member of a geodesign team. While in the team, you will assume the role(s) of individual stakeholder group(s) and contribute your expertise to a Methods Plan for the given geodesign study.

The case project and your role(s) will be defined in Lesson Two of this course.

Course Evaluation

You will receive a grade for each assignment as well as written feedback. Assignment grades will be determined based on the content and clarity of the submission.
You will also receive grades for your individual contribution to a Team Scoping Document and a Team Methods Plan for a given case project. In addition to your assignments and methods plan, you will be assessed on your contribution and collaboration in class discussions via Yammer. Students will be evaluated on the quality, insight, and productivity of their contributions.

The percentage that each component will contribute to the final grade is as follows:
- 20%   Lesson Assignments
- 20%   Scoping Document + Presentation
- 20%   Discussion / Collaboration
- 40%   Methods Document + Presentation

Lesson Assignments (20%)
Assignments will generally consist of 3-4 questions related to the lesson. Each assignment is a critical building block of the Methods Plan. Assignment evaluation is based on (4 As):
- 30%   *Ability* – Is it clear that you understand the material?
- 30%   *Application* – Are you able to apply the concept(s) to a problem?
- 30%   *Articulation* – Do you clearly communicate a response? This includes correct spelling, grammar, formatting, etc.
- 10%   *Amplitude* – Are your submissions complete and on time.

Scoping Document (20%)

As a member of a geodesign team, you will collaborate on a scoping document for the case project. Using Yammer's discussion threads for model discussion, you will scope one model plus the decision model and present it as a VoiceThread. Each VoiceThread model will then undergo peer-review. Once reviewed and edited, a single VoiceThread presentation and compiled document will be created as the shared scoping document for the case project.

The scoping document will be evaluated based on the following criteria (4 Cs):

40%   *Content* – A more descriptive content rubric will be provided after Lesson Two.

30%   *Clarity* – Is the scoping clearly and concisely presented.

20%   *Composition* – Are the graphics and composition of the presentation presented at a high quality?

10%   *Collaboration* – Was the scoping materials effectively shared for team collaboration? Were peer-review comments incorporated into a revised document?

Methods Plan (40%)

As a member of a geodesign team, you will collaborate on a Methods Plan for the case project. Using Yammer's discussion threads for methodology discussion, you will specify the methods of the Decision and Evaluation Models for the case project. Similar to the Scoping Document, your model contributions will undergo peer-review via both Yammer discussion threads and VoiceThread.

The Methods Plan will be evaluated based on the following criteria (4 Cs):

40%   *Content* – A more descriptive content rubric will be provided after Lesson Three.

30%   *Clarity* – Are the methods clearly and concisely presented.

20%   *Composition* – Are the graphics and composition of the presentation presented at a high quality?

10%   *Collaboration* – Was the Methods Plan effectively collaborated? Were peer-review comments incorporated into a revised plan?

Discussion / Collaboration (30%)

Collaboration is a key part of the geodesign process. Collaboration is an opportunity for you to share ideas and dialogue with your peers. You will be expected to contribute regularly to the groups and maintain an on-going conversation with your peers.

We will be using www.yammer.com as our forum for collaboration and participation. Students will be invited to join the "Geodesign at PennState" network, and a private group specifically for GEODZ 822. Collaboration within that group will only be viewable by students in this course.

Students will be evaluated on the quality, insight, and productivity of their contributions.

50%   *Quality* – Are your discussion grounded in a theoretical foundation?
50%   *Insight* – Do you contribute something new to the conversation?

Late Assignment Policy
In an eight-week format, this course moves at a very fast pace. Assignments that are submitted late affect both your ability to receive timely feedback and your ability to be prepared for the following assignment. As such, late submissions have significantly more penalty than can be conveyed through a grade deduction. However, late submissions will be assigned a 10% deduction. The course instructor will not review assignments submitted more than one week after the original submission date.

Course Grades
A+   97.1% - 100%
A   93% - 97%
A-   90% - 92.9%
B+   87.1% - 89.9%
B   83% - 87%
B-   80% - 82.9%
C+   77.1% - 79.9%
C   73% - 77%
C-   70% - 72.9%
D   63% - 69.9%
F   < 63%

Course Schedule

All assignments should be complete and submitted to the specified delivery method by 11:59pm PST on the Monday following new lesson material. The instructor will generally provide feedback on each assignment within 72hrs of the submission date. A full course calendar of assignment and collaborative review due dates is attached to the syllabus. A typical week is outlined below:

MON	TUES	WED	THUR	FRI	SAT / SUN
New lesson overview available online		Mid-week instructor check-in of Yammer discussion		Team Collaboration Component Due	Student work on lesson assignment individually or collaborate on team assignment
Assignment Due @ 11:59pm PST					

AUGUST 2015					
MON	TUES	WED	THUR	FRI	SAT / SUN
17 Lesson 1	18	19	20	21 Survey Due	22/23 Individual Work
24 Lesson 2 Assignment 1	25	26	27	28 Scoping Collaboration	29/30 Team Collaboration
31 Lesson 3 Case Project Draft Scoping				Scoping Collaboration	Team Collaboration

SEPTEMBER 2015

MON	TUES	WED	THUR	FRI	SAT / SUN
	1	2	3	18 Scoping Collaboration	5/6 Team Collaboration
7 Lesson 4 Assignment 2	8	9	10	11	12/13 Team Collaboration
14 Lesson 5 Assignment 3 + Final Scoping	15	16	17	18	19/20 Individual Work
21 Lesson 6 Assignment 4	22	23	24	25 Values Collaboration	26/27 Team Collaboration
28 Lesson 7 Assignment 5	29	30	24	25 Evaluation Collaboration	26/27 Team Collaboration
28 Lesson 8 Draft Method	29	30			

OCTOBER 2015

MON	TUES	WED	THUR	FRI	SAT / SUN
			1	2 Method Collaboration	5/6 Team Collaboration
7 Method Plan + Course Survey					

Course Delivery Format

This course will be delivered entirely online. There are no face-to-face class sessions. Be sure to go through the Getting Started module thoroughly to prepare yourself for how this course will operate and what is expected of you. In short, the course is Web-based. It makes extensive use of Penn State's Learning Management System called ANGEL for discussion activities, assignment submissions, and grade reporting. The course Web pages reside outside ANGEL and supply you with most of the course content, directions, media, and activities you will need. The Getting Started module will explain the delivery format in more detail.

Since this course is offered purely online, all of our correspondence will take place via email. I will be sending out weekly emails and announcements using ANGEL email, at the beginning of each lesson, to remind you of important class information, and assignment due dates. I expect all students to check their email 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 email me with any questions or concerns, but remember that all communication with me must take place via ANGEL email.

Technical Requirements

Operating System

Windows 2000/XP or Vista, Mac OS X 10.2 or higher (10.3 or higher recommended)

Web browser

Mac OS X: Firefox, Safari (current version) Windows: Firefox, Safari, Internet Explorer (current version) Firefox and Safari are preferred as they will provide the fastest experience possible for e- Learning Institute courses. Due to nonstandard handling of CSS, JavaScript and caching, we do not support using Internet Explorer 6 as your browser.

Other Requirements

- Adobe Flash Player 9 or later
- A minimum of 256 MB of RAM
- GHz or higher processor
- 500 MB of available (a.k.a "free") hard disk storage is recommended
- Broadband (cable or DSL) connection 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.

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.