

DCP 1010 GEODESIGN COLLOQUIUM

Fall 2017

Instructor: Crystal Goodison

"Geodesign is the process of changing geography by design."

Carl Steinitz

SYLLABUS

Class meeting times: Thursdays, 5th Period (11:45am – 12:35pm)

Location: ARCH 0411

Credits: 1 Credit

Instructor: Crystal Goodison, cgoody@ufl.edu

Office hours: Email for appointment

Prerequisites: None

COURSE DESCRIPTION:

Geodesign is a relatively new term, but it describes an activity which is not new. Geodesign involves various disciplines (such as urban planning, landscape architecture, geography, physical sciences, and information technology) collaborating to design solutions to current problems with a spatial focus (such as climate change, population growth, resource limitations and more). The course will expose students to Geodesign topics through presentations from a variety of professionals and academics engaged in Geodesign work. Some presentations will be online and others will be in person. This course is intended to help students to understand the scope, applications, and implications of Geodesign principles.

COURSE GOALS AND/OR OBJECTIVES

- Understand the various disciplines that collaborate in Geodesign work
- Develop an understanding of different types of projects that involve Geodesign
- Be able to identify projects and research that utilize Geodesign
- Understand the types of current problems that can be addressed with Geodesign

COURSE COMMUNICATION

Preferred method of contact is email: cgoody@ufl.edu. The instructor is also available for phone calls or in person meetings by appointment. Email for an appointment. Canvas course homepage is:

<https://ufl.instructure.com/courses/342732>

INSTRUCTIONAL METHODS

The concepts will be covered in lectures, presentations, videos, and class discussions. Students will deepen their understanding of the materials through readings, homework assignments and a final project.

REQUIRED TEXTBOOKS (Available online)

Geodesign: Past, Present, and Future

<http://www.esri.com/library/ebooks/geodesign-past-present-future.pdf>

Changing Geography by Design: Selected Readings in Geodesign

<http://www.esri.com/library/ebooks/GeoDesign.pdf>

COURSE SCHEDULE

Week	Date	Topic/ Assignments
1	8/24/17	Introduction and Course Overview Assignment: Read “Designing our Future”: Pg.9 -19, from <i>Changing Geography by Design</i> Available online: http://www.esri.com/library/ebooks/GeoDesign.pdf Watch: Geospatial Revolution Trailer: http://geospatialrevolution.psu.edu/trailer.php Watch: TED talk - Jack Dangermond http://www.esri.com/videos/watch?videoid=125&isLegacy=true&title=jack-dangermond-talks-about-geodesign-at-ted2010
2	8/31/17	Geodesign History, Principles, and Concepts of Geographic Information Systems Geodesign Case Studies and Applications Reading Assignments: “Geodesign Tackles Big Problems and Brings GIS into the Design Fields”, p. 29 –32 in <i>Geodesign: Past, Present, and Future</i> . Available online: http://www.esri.com/library/ebooks/geodesign-past-present-future.pdf “Can Geodesign Help Us Adapt to Climate Change?”, p. 44 – 47, <i>Geodesign: Past, Present, and Future</i> . Available online: http://www.esri.com/library/ebooks/geodesign-past-present-future.pdf
3	9/7/17	Geodesign for biodiversity conservation

		<p><i>Guest Speaker: Mike Volk, UF Center for Landscape Conservation Planning, School of Landscape Architecture and Planning</i></p> <p>Reading Assignments: “Making Smart Growth Smarter with GeoDesign”: Pg. 25-32, from <i>Changing Geography by Design</i> Available online: http://www.esri.com/library/ebooks/GeoDesign.pdf</p> <p>What is Geodesign and Can it Protect us from Natural Disasters? https://blogs.scientificamerican.com/observations/what-is-geodesign-and-can-it-protect-us-from-natural-disasters/</p>
4	9/14/17	<p>Geodesign for urban design and economic development</p> <p><i>Guest Speaker: Gerry Dedenbach, Vice President, Causseaux, Hewett, & Walpole, Inc.</i></p> <p>Assignment 1: Reflection paper (due on 9/21)</p>
5	9/21/17	<p>Geodesign for transportation planning</p> <p>Assignment 1 due</p>
6	9/28/17	<p>Geodesign for assessing sea level rise</p> <p>Assignment 2: Reflection paper (due on 10/5)</p>
7	10/5/17	<p>Geodesign for energy and resource efficiency</p> <p><i>Guest Speaker: Hal Knowles, UF Program for Resource Efficient Communities</i></p> <p>Assignment 2 due</p>
8	10/12/17	<p>Geodesign for collecting local knowledge</p> <p><i>Guest Speaker: Sarah Van Wart, UC Berkeley School of Information (via Skype)</i></p> <p>Assignment 3: Reflection paper (due on 10/19)</p>
9	10/19/17	<p>Geodesign for community revitalization</p> <p><i>Guest Speaker: Andrew Meeker, Project Manager, City of Gainesville Community Redevelopment Agency</i></p> <p>Assignment 3 due</p>
10	10/26/17	<p>Geodesign for land use modeling</p>

		<i>Guest Speaker: Paul Zwick, UF Urban & Regional Planning & Peggy Carr, UF Landscape Architecture</i> Assignment 4: Reflection paper (due on 11/2)
11	11/2/17	Using Geodesign for transportation and safety <i>Guest Speaker: Nathaniel Wingfield, UF GeoPlan Center</i> Assignment 4 due
12	11/9/17	Review and discussion of final projects
13	11/16/17	Geodesign for modeling population growth <i>Guest speakers: Rich & Suzanne Doty, UF Bureau of Business and Economic Research (BEER)</i>
14	11/23/17	<i>Thanksgiving Day – no classes</i>
15	11/30/17	Last class: Presentation of Student Final Projects

COURSE POLICIES

ATTENDANCE POLICY

Attendance is mandatory. The majority of the course content is delivered in-class via lectures and presentations. Hence, attendance and class participation constitutes a significant portion (30%) of the student's grade. One unexcused absence is permitted. Any absences thereafter will lower the student's grade by 2%. Students who consistently arrive late for class will be docked attendance points.

CLASS Demeanor

Students are expected to arrive to class on time and behave in a respectful manner to the instructor and fellow students. Course communication (both in person and online) should be civilized and respectful to everyone. Please avoid the use of cell phones in the classroom.

LATE WORK POLICY

Work should be completed and submitted by the designated due date and time. A grade reduction of 10% per day will occur unless there is an acceptable excuse for the late submittal. If you are unable to submit

GRADING POLICIES

ASSIGNMENTS AND BASIS FOR GRADES

Assignments: 40%

Attendance: 30%

Participation: 15%

Final Project: 15%

Assignments: Four written reflection papers will be assigned throughout the semester (see course schedule for dates). The reflection paper should be 1-2 pages in length and reflect upon the classroom presentations and discussion. Specific questions will be given to guide the assignment.

Attendance: Attendance is mandatory. Because the majority of the content covered in this course is delivered in-class via lectures and presentations, attendance and class participation constitute a significant portion of the student's grade. One unexcused absence is permitted. Any absences thereafter will lower the student's overall grade by 2%. Students who consistently arrive late for class will be docked attendance points. If for some reason you are not able to attend, please be sure to notify your instructors in advance.

Participation: Students are expected to participate in class discussions.

Final Project: The final project will be a written proposal (3-5 pages) outlining a project using Geodesign principles. Students will be required to make a short verbal presentation to the class explaining their idea.

GRADING POLICY

Letter Grade	Percentage	Grade Points
A	93-100%	4.00
A-	90-92%	3.67
B+	88-89%	3.33
B	83-87%	3.00
B-	80-82%	2.67
C+	78-79%	2.33
C	73-77%	2.00
C-	70-72%	1.67
D+	68-69%	1.33
D	58-67%	1.00
D-	55-57%	0.67
E	Below 55%	0.00

For greater detail, see the Grades section of the [Undergraduate Catalog for the University of Florida](#). It also contains the policies and procedures, course descriptions, colleges, departments, and program information for UF.

UF POLICIES

SPECIAL ACCOMMODATIONS

Students requesting disability-related academic accommodations must first register with the [Disability Resource Center](#). The Disability Resource Center will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation.

UNIVERSITY POLICIES

University policies on such matters as add/drop, incomplete, academic probation, termination of enrollment, reinstatement, and other expectations or procedures can be found in the [graduate student handbook](#) and at the [Dean of Students website](#).

UNIVERSITY POLICY ON ACADEMIC MISCONDUCT

Academic honesty and integrity are fundamental values of the University community. Students should be sure that they understand the [UF Student Honor Code](#).

STUDENT HONOR CODE

UF students are bound by The Honor Pledge which states: "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code". On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment."

In adopting this Honor Code, the students of the University of Florida recognize that academic honesty and integrity are fundamental values of the University community. Students who enroll at the University commit to holding themselves and their peers to the high standard of honor required by the Honor Code. Any individual who becomes aware of a violation of the Honor Code is bound by honor to take corrective action. Student and faculty support are crucial to the success of the Honor Code. The quality of a University of Florida education is dependent upon the community acceptance and enforcement of the [Honor Code](#).

STUDENT SUPPORT SERVICES

For any technical issues you encounter with your course please contact the UF Computing Help Desk at 342-392-HELP (4357). For Help Desk hours visit: <http://helpdesk.ufl.edu>. For course content questions contact your instructor.

Disclaimer: This syllabus represents my current plans and objectives. As we go through the semester, those plans may need to change to enhance the class learning opportunity. Such changes, communicated clearly, are not unusual and should be expected.