

DCP 1010 GEODESIGN COLLOQUIUM

Fall 2020

Instructor: Crystal Goodison

SYLLABUS

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

Location: Online via Zoom

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 draws from multiple disciplines to create collaborative design solutions to current problems with a spatial focus. Urban planners, landscape architects, geographers, physical scientists, computer scientists, and others work together on issues like climate change, population growth, resource limitations, biodiversity conservation, and land use planning. The course will expose students to Geodesign topics through presentations from a variety of professionals and academics engaged in Geodesign work. Presentations will be online. This course is intended to help students to understand the scope, applications, and implications of Geodesign principles.

COURSE GOALS AND/OR OBJECTIVES

- Identify the various disciplines that collaborate in Geodesign work
- Recognize different types of projects and research that involve Geodesign and spatial analysis
- Explain how Geodesign can be used to address current problems
- Apply Geodesign and spatial thinking to solve a current event or issue of interest

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/355786>

INSTRUCTIONAL METHODS

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

REQUIRED TEXTBOOKS - None

Recommended resources (optional):

Geodesign: Past, Present, and Future

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

Introducing Geodesign: The Concept

<https://www.esri.com/library/whitepapers/pdfs/introducing-geodesign.pdf>

COURSE SCHEDULE

| Week | Date | Topic/ Assignments |
|-------------|-------------|---|
| 1 | 9/3/20 | Introductions, Course Overview, Expectations Discussion assignment (due on 9/10) |
| 2 | 9/10/20 | Geodesign History, Principles, and Concepts of Geographic Information Systems Assignments (read & watch before 9/17 class): “Geodesign: Elevating Planning and Design Decisions to Future Proof Outcomes”, Jack Dangermond https://www.forbes.com/sites/esri/2018/03/05/geodesign-elevating-planning-and-design-decisions-to-future-proof-outcomes/#270c53f745c5 Watch Maptivists (6 min) https://youtu.be/Dgzuloy5VVU |
| 3 | 9/17/20 | Geodesign Case Studies and Applications |
| 4 | 9/24/20 | Tracking Water Use <i>Guest speaker: Dr. Nick Taylor, UF IFAS State Specialized Extension Agent</i> |
| 5 | 10/1/20 | Our changing state: modeling population growth and demographic shifts <i>Guest speaker: Rich Doty, Demographer, UF Bureau of Business and Economic Research (BEER)</i> Assignment: Reflection Paper 1 (due 10/8) |
| 6 | 10/8/20 | Mapping our communities: urban planning + GIS <i>Guest speaker: RoseMarie Fusco, Urban Planner, Ensite</i> |
| 7 | 10/15/20 | Identifying Areas for Community Solar Gardens in Florida |

| | | |
|----|----------|--|
| | | <p><i>Guest speaker: Parker Johnson, GIS Analyst, IFAS Program for Resource Efficient Communities</i></p> <p>Assignment: Reflection Paper 2 (due 10/22)</p> |
| 8 | 10/22/20 | <p>Business Intelligence: The power of where</p> <p><i>Guest speaker: Amber Cabrera, Data Analyst</i></p> |
| 9 | 10/29/20 | <p>GIS for Sustainable Development</p> <p><i>Guest speaker: Caroline Akoth, Spatial Data Scientist and Co-Founder of Women in GIS, Kenya</i></p> <p>Assignment: Reflection Paper 3 (due 11/5)</p> |
| 10 | 11/5/20 | <p>Mapping Equity and Opportunity</p> <p><i>Speaker: Crystal Goodison</i></p> |
| 11 | 11/12/20 | <p>Underwater: Tools for modeling sea level rise and flooding</p> <p><i>Speaker: Crystal Goodison</i></p> <p>Assignment: Reflection Paper 4 (due 11/19)</p> |
| 12 | 11/19/20 | <p>Protecting Water Resources: Maritime Management Plan for Jacksonville</p> <p><i>Guest speaker: Ashley Johnson, Associate Professor of Geography and Sustainability, Jacksonville University</i></p> |
| 12 | 11/26/20 | NO CLASS - THANKSGIVING |
| 13 | 12/3/20 | <p>Last day of class</p> <p>Final Project Presentations</p> |

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 constitute a significant portion 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, guest speakers, and fellow students. Course communication should be civilized and respectful to everyone. Please avoid the use of cell phones during class. To insure accountability and participation, cameras are required to be on during the class period.

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.

GRADING POLICIES

ASSIGNMENTS AND BASIS FOR GRADES

Assignments: 45%

Attendance: 20%

Participation: 15%

Final Project: 20%

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

Reading assignments are listed in Canvas.

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 me in advance.

Participation: Students are expected to participate in class discussions. There will be at least one discussion assignment in Canvas.

Final Project: The final project will be a written proposal (2-3 pages) and short presentation outlining a proposed project using Geodesign principles. Students will develop a hypothetical project, based on a real current issue of interest.

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.

STUDENT FEEDBACK

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at <https://gatorevals.aa.ufl.edu/students/>.

Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.

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.