

## **LAA 6656 Section 8692 & URP 6341 Section 6073**

Environmental Design and Planning Practicum/GeoDesign 1

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### **SYLLABUS**

Spring Semester, 2012

6 credits, MWF Periods 7 - 9 ARC 411

Prerequisites – LAA 6382 + URP 6270 and/or permission of the instructors

#### *General*

#### **Course Purpose**

This course is intended to provide students experience in the evolving area of GeoDesign. "Geodesign is a design and planning method which tightly couples the creation of design proposals with impact simulations informed by geographic contexts." (Flaxman 2010) or: Geodesign provides a design framework and supporting technology for professionals to leverage geographic information, resulting in designs that more closely follow natural systems and effective urban form. (modified from Esri)

Pre-GIS environmental design processes will be discussed and land use suitability and assessment of environmental sensitivity using GIS will be employed. We will integrate principles and methods of urban and regional planning and design, landscape ecology, conservation biology, and GIS analysis to design sound land use and conservation plans and strategies.

This is the first studio in a two semester sequence. Students will be asked just after Spring Break to decide whether to take both studios or only the first in the sequence. The last assignment will vary, depending on the choice made. The focus of the first studio is suitability analysis to identify land use conflicts and opportunities. The focus of the second studio will be the development of detailed alternative future land use scenarios (or visions), each based on policy assumptions that allow one to test implications of each scenario.

#### **Topics to be addressed:**

- landscape ecology
- geographic information systems
- land use planning
- environmental planning theory and methods
- landscape / ecosystems management
- urban density
- urban morphology

#### **Problem Statement**

Our studio for Spring 2012 will focus on the Tampa Bay Region. The following counties will be examined as part of this studio project: Pinellas, Pasco, Polk, Hardee, Manatee.

DeSoto and Hillsborough. At the conclusion of the two semester sequence, alternative future land use scenarios will be developed for the region.

### *Performance and Grading*

#### **Schedule and Basis for Grades**

Assignments will be produced through a combination of group and individual work. At the beginning of the semester, students will be given a set of goals and objectives that will drive the suitability analysis. Three groups will be formed, each to focus on a different set of land uses: Agriculture/Conservation, Urban 1 and Urban 2.

<b>Assignments</b>	<b>Estimated Dates</b>	<b>Percent of Grade</b>
Assignment One – Students will be asked to research available GIS data sources and to ascertain which sources are most appropriate for the analyses to which they’ve been assigned.	January 7 - 18	10%
Assignment Two – Prepare suitabilities for objectives and sub-objectives.	January 23 – March 1	40%
Assignment Three – Prepare final suitabilities for agriculture, conservation and urban land uses.	March 11 - 29	25%
Assignment Four Option 1 – Explore land use conflict on undeveloped lands, and mixed use and infill opportunities on developed lands. Assignment Four Option 2 - Develop an individual or small group project to focus on topics such as water restoration, wildlife corridors, ecotourism development, trail development, productive agriculture, transportation, or new sustainable urban infrastructure within the study area based on the results of the suitability analysis developed in the first portion of the semester. (Group or Individual)	March 12 – April 24	25%

#### **Grading Scale**

The following scale and associated letter grades will be used in this course.

<b>Letter Grade</b>	<b>A</b>	<b>A-</b>	<b>B+</b>	<b>B</b>	<b>B-</b>	<b>C+</b>	<b>C</b>	<b>C-</b>	<b>D+</b>	<b>D</b>	<b>D-</b>	<b>E</b>
<b>Numeric Grade</b>	93-100	90-92	87-89	83-86	80-82	77-79	73-76	70-72	67-69	63-66	60-62	0-59
<b>Quality Points</b>	4.0	3.67	3.33	3.0	2.67	2.33	2.0	1.67	1.33	1.0	0.67	0.0

For greater detail, see the Registrar’s Grade Policy regulations at <http://www.registrar.ufl.edu/catalog/policies/regulationgrades.html>

According to Departmental Policy, Landscape Architecture majors must receive a C or better to move forward. Any grade lower than a C will require that the course be taken over again.

### **Late Work**

Every attempt is to be made to submit work on the day assigned. A grade reduction of 10% per day will occur unless there is an acceptable excuse for the late submittal.

### **Attendance**

Attendance at all class meetings is expected. If for some reason you are not able to attend, please be sure to notify your instructors in advance.

### **Special Events**

February 1 DCP Research Showcase

### **Final Presentations**

The final presentation and all presentations leading up to the final presentation will be assembled using MS Powerpoint. These will The final presentation is scheduled for Wednesday April 24<sup>th</sup>. Each student will also need to prepare and submit 4 graphic images

### **Submission of Student Work**

All student work may be retained and used by the Departments of Landscape Architecture and/or Urban and Regional Planning. Digital Copies of student work for this course must be turned in at the completion of each assignment. No grades will be computed into the final course grade until digital submissions have been turned in as requested via Sakai. Files are to be named as follows:

**course# name project student name. dwg/pdf/jpg/**

*Example: 3352PlantDesAssig10Smith*  
4ch 8ch 8ch 6ch

Use caps for separation

No spaces, hyphens, or underscoring

### ***Texts, Hardware, Software, and other Resources and Regulations***

#### **Readings**

Readings will be circulated in class or on the K drive during the semester. These have been selected to provide important background for addressing the problem under consideration. Students should consider the purchase of the following text for use in the class.

Carr and Zwick. Smart Land Use Analysis: The LUCIS Model. ESRI 2007

## **Disk Storage**

Each student is expected to have a minimum 500 GB external hard drive to store class GIS data and results.

## **Useful Web Links**

The following are useful initial weblinks:

Critical Lands and Waters Identification Project

<http://www.fnai.org/clip.cfm>

Office of Greenways and Trails Florida Ecological Network website

<http://www.dep.state.fl.us/gwt/about/ecological.htm>

Conservation Trust for Florida Greenways Program website

<http://www.conserveflorida.org/index.php/greenways-program.html>

1000 Friends of Florida Florida Ecological Network History and Programming Article

<http://www.1000fof.org/PUBS/EcologicalGreenwaysFinalVersion.pdf>

1000 Friends of Florida Tools for Protecting Florida's Working Landscapes Article

<http://www.1000fof.org/PUBS/Fl-working-landscapesFinal2011.pdf>

Florida Forever Needs Assessment

<http://www.fnai.org/FlForever.cfm>

Bureau of Economic and Business Research Information

<http://www.bibr.ufl.edu/start>

Florida Rural Land Stewardship Area Program

<http://www.dca.state.fl.us/fdcp/dcp/rurallandstewardship/>

Florida Forever Coalition website

<http://www.supportfloridaforever.org/>

Florida 2060 human population projection

<http://www.1000friendsofflorida.org/planning/2060.asp>

1000 Friends of Florida Working to Sustain Florida's Rural and Natural Lands Report

<http://www.1000friendsofflorida.org/planning/ruralreport.asp>

1000 Friends of Florida Wildlife Habitat Planning Strategies Manual

<http://www.floridahabitat.org/wildlife-manual>

## **Academic Honesty**

The University requires all members of its community to be honest in all endeavors. When students enroll at UF they commit themselves to honesty and integrity. Your instructor fully expects you to adhere to the academic honesty guidelines you signed when you were admitted to UF. In completing the registration form at the University of Florida, every student has signed the following statement:

*"I understand the University of Florida expects its students to be honest in all their academic work. I agree to adhere to this commitment to academic honesty and understand that my failure to comply with this commitment may result in disciplinary action up to and including expulsion from the University."*

Furthermore, on work submitted for credit by all UF students, the following pledge is either required or implied:

*“On my honor, I have neither given nor received unauthorized aid in doing this assignment.”*

It is to be assumed that all work will be completed independently unless the assignment is defined as a group project by the professor. This does not mean that students cannot help one another in learning material, but all work that is turned in must be independent work of that individual.

Misrepresentation or plagiarism, such as claiming another’s work to be one’s own, refers to graphic and design work as well as written work. Submitting work from one course to fulfill the requirements of another (unless expressly allowed by the instructor) is also misrepresentation.

The University Honor Code and the Department of Landscape Architecture Academic Honesty Policy are to be followed to the letter. Any students found to have cheated, plagiarized, or otherwise violated the Honor Code in any assignment will be punished according to the severity of the act and may be referred to the Honor Court. It is each student’s responsibility to report any infraction, and it is expected that each faculty will report all infractions as well.

For more information, see <http://www.chem.ufl.edu/~itl/honor.html> and the Department of Landscape Architecture Academic Honesty Policy.

### **Student Accommodations**

Support services for students with disabilities are coordinated by the Disability Resource Center in the Dean of Students Office. To obtain individual support services, each student must meet with a support coordinator in the Disability Resources Program who will work with the individual student and the instructor to determine appropriate support strategies. There is no requirement for a student to self-identify his/her disability; however, students requesting classroom accommodations must register with the Dean of Students Office. Appropriate documentation regarding the student's disability is necessary to obtain any reasonable accommodation or support service.

### **Counseling Resources**

Students experiencing crisis or personal problems that interfere with their general well-being are encouraged to utilize the university’s counseling resources. Both the Counseling Center and Student Mental Health provide confidential counseling services at no cost for currently enrolled students. The Counseling Center is located at 301 Peabody Hall (next to Criser Hall). Student Mental Health is located on the second floor of the Student Health Services in the Infirmary. For further information on services and how to make an appointment, call the Counseling Center at 392-1575 or Student Mental Health at 392-1171. See the following web sites for additional resources: Counseling Center: [www.counsel.ufl.edu](http://www.counsel.ufl.edu) and Student Mental Health: <http://www.hsc.ufl.edu/shcc/smhs.htm>

**Religious Holidays**

The university calendar does not include observance of any religious holidays. The Florida Board of Governors and state law govern university policy regarding observance of religious holidays. Students shall be excused from class or other scheduled academic activity to observe a religious holy day of their faith with prior notification to the instructor. Students shall be permitted a reasonable amount of time to make up the material or activities covered in their absence. Students shall not be penalized due to absence from class or other scheduled academic activity because of religious observances.