Environmental Planning and Design Studio

LAA 4356

6 Credit Hours

Fall 2018
Monday/Wednesday/Friday, 8:30-11:30am, Arch 316

Instructor: *Timothy Murtha, PhD*
                432 ARCH, Email: tmurtha@ufl.edu

Office Hours: MW 1:00 to 2:00 or by appointment.

Course Website: http://lss.at.ufl.edu (CANVAS)

Course Communications: Questions regarding this course may be submitted via email or during class sessions.

Required Text: Readings will be assigned weekly. I believe strongly that productive and thoughtful landscape architecture requires reflective and critical reading and writing. See week 1 reading and writing assignment to get started (I'll post that on Tuesday) and I'll supplement throughout the semester.

Reference (Recommended) Text: McHarg, Ian L. 1992. Design with nature. New York: J. Wiley.

Reference (Recommended) Text: Law, Michael, and Amy Collins. Getting to Know ArcGIS Desktop. Third edition, updated for ArcGIS 10.1. Redlands, CA: ESRI Press, 2013.

Course Description: This design studio will introduce students to the important contribution of landscape architecture to regionalism and regional design. We will also engage regional thinking for landscape design. And while the course covers regional planning and decision-making at the regional scale (county-scale and larger) using GIS and land use suitability analysis techniques, the studio project is tightly focused on how region (and complex geospatial modeling and analysis can inform and influence landscape design (at multiple scales). Analysis and modeling made at a regional scale will be used (I'd argue it should always be used) to inform design at the site scale. It will build upon the principles and technologies introduced in previous lecture classes and design studios. Students will have the opportunity to engage complex geospatial technologies for landscape design through the overall studio project, readings, writing, and a ~ 2 week international design charrette coupled to a collaborative research project I am working on in Mexico. Most importantly, we engage landscape in this studio as a coupled natural and human system.

Course Background: The Broader Landscape

This semester we will look closely at the larger landscape and associated systems. We will explore a major landscape feature that will serve as a vehicle for understanding systems as an expression of cultural and natural processes. There are two very good reasons to learn to work at the broader landscape scale: to make informed planning, design, and management recommendations at that level; and to enlighten site scale design with a broader geographic perspective—how the site fits into the larger context. Following are definitions of key concepts that will be examined this semester:

- System — A group of interacting and interdependent units that form an organized whole. If any part of the system changes, then changes in other components as well as the entire system may occur. The same logic holds for landscape systems.
- Landscape — A medium-scale area of land larger than a site that has recognizable similar internal characteristics that are distinct from those of other areas; may be described on any basis that unifies it and differentiates it from other landscapes. Landscapes may have a few or many defining features, but they are almost always complex.
- Site / System / Landscape / Region — Varying scales, ranging from small to large. Landscape architects and planners tend to think of sites as being nested within their landscapes, which in turn lie within a region (or a part of the region, known as a sub-region). A collection (or system) of sites may comprise a significant portion of a landscape or region. Similarly, non-site - based systems (streams, energy flows, highways, etc.) may link sites, so that together linear systems and sites may compose a substantial part of a landscape region. As we will learn this semester, site, system, landscape, and region are interrelated in multiple ways.

Prerequisite Knowledge and Skills: LAA 4353 or URP 4273.

Purpose of Course: This design studio will introduce students to decision-making at the regional scale (county-scale and larger) using GIS and land use suitability analysis techniques within a group and individual setting. The studio has three key components:

1. **(Phase 1) Descriptive Analysis and Conceptual Design:** In the first half of the semester, working within a multi-county study area, students will define goals and objectives for future land use decisions as they relate to suitability for conservation, society, agriculture, or future urban land uses. These goals and objectives will be used to guide a regional GIS analysis to identify future suitability for each of the three land use categories within the study area. Students will then work in groups to synthesize this information and create a composite land use suitability map for the study area.
2. **(Phase 2) Design Project:** Finally, students will conduct individual projects in the second half of the semester based on the results of the initial regional studies.
3. **(IDW) International Design Workshop:** In addition to the two phased components of the studio, we will take roughly 1-2 weeks of the semester to apply the methods, techniques, and design thinking we are using in the studio in an international setting,

the northern coast of the Yucatan Peninsula. The workshop/charrette offers a unique perceptive window into the opportunities and challenges of regional design in cross cultural contexts.

4. **WRITING:** Region and regionalism are critical intellectual concepts championed throughout the history of landscape architecture as a practice and discipline. The purpose of the writing assignments are to expose you to this history and to inspire curiosity about how you can play a transformative role in landscape architecture.

Course Goals and/or Objectives: The primary objectives of this course are as follows:
- *To understand the influence of regional context and regional land use decisions on land use planning and design decision-making at a variety of scales.*
- *To apply regionalism and regional thinking for landscape design.*
- *To explore and investigate the intellectual history of 'region' in landscape architecture.*
- To develop familiarity with GIS, descriptive mapping and analysis, and GIS-based suitability and overlay analysis.
- Application of these techniques to the process of inventory, analysis, and synthesis within a specific study area.
- To explore principles of conservation ecology, socio-ecological systems, niche inheritance, and settlement ecology.

Teaching Philosophy: My aim in this course is to foster a dynamic, active, and collaborative learning environment for students, visiting critics, and instructors. I will guide students through the process of inventory, suitability analysis, and synthesis using GIS at a regional scale, while providing ample room for individual contributions in order to enrich the process as a whole. As a studio instructor, I am open an honest and expect the same from my students.

Be curious and try new things, but always realize that we are constrained by deadlines and timelines. So, let's all try to be productive, adaptive, and collaborative.

Instructional Methods: Course instruction will be primarily based on lectures provided during studio time, workshops, and individual/group desk critiques to assess and guide progress.

Grading Policies:

<u>Primary Tasks and Evaluation</u>: We anticipate the following list of tasks and evaluation weightings for the semester.

Tasks	Percent of Grade
WRITING ASSIGNMENTS: 3 short format writing assignments covering region, regionalism, and landscape architecture. (Individual)	9%
PHASE 1 EXERCISES + WORKSHOPS: Complete a series of GIS exercises based on in-class lectures to build understanding and proficiency in ArcGIS (Individual)	20%
PHASE 1 PROJECT: Inventory/Descriptive Analysis - Conduct regional character research for the study area atlas (Group/Individual)	20%
PHASE 2 PROPOSAL: Goals and objectives for the study area (Individual/Group)	5%
PHASE 2 SUITABILITY ANALYSIS: Use the goals and objectives defined in Task One to direct suitability analysis for agriculture, conservation and human settlement within the study area. Work within groups to create a composite future land use plan for the study area, which combines results from the regional suitability analysis. (Individual/Group)	10%
PHASE 2 STUDIO PROJECT: Develop individual or small group projects 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. Other specific projects may be provided based on the study area chosen for the semester. (Individual/Small Group)	26%
IDW: Using the concepts and methods (where appropriate) from the course a rapid landscape ecological planning and regional landscape design project will be conducted during the semester.	10%

Grading Scale: 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. Grading will adhere to the University of Florida Grade Policy:

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

Course Schedule

Schedule and Final Exam: A detailed schedule for this course will be provided at the beginning of the semester and will be updated as needed. The final exam for this studio will consist of a final project presentation Friday December 1, 2017 (please take a look at your schedules now and let's see how that works).

Formal class meeting times may be subject to change and will be discussed at the beginning of the semester.

Course Policies:

Attendance Policy: Attendance to class is mandatory. One unexcused absence is permitted. Each additional absence will lower the student's grade by 4%. Students are requested to contact an instructor if they will not be attending the discussion session. *Cell phone use is not acceptable in class except for emergencies and should be conducted outside of the studio.*

Assignment Policy: Students are expected to complete all assignments in a timely fashion, as well as actively participate in the discussion and combined group tasks. Timely completion of all project requirements is expected. Late work will be penalized 4% per day unless there is an acceptable excuse for the late submittal. Work submitted more than one week late will not be accepted. The final presentation and all presentations leading up to the final presentation will be assembled using MS Powerpoint.

Course Technology: ESRI ArcGIS software will be available to all students at the beginning of the semester. *Each student is expected to have a minimum 100 GB external hard drive to store class GIS data and results.* All course content will be available through SAKAI, UF's online learning portal unless otherwise specified. Students may access this site at https://lss.at.ufl.edu/ by logging in with their UF credentials. All assignments are to be submitted to Sakai unless otherwise indicated.

All student work may be retained and used by the Department of Landscape Architecture. 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. Please follow the directions given by the instructor as to how they will be submitted (Sakai, CD, PDF, word file, etc.). However, all files must 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
> In cases of models and other 3-D work, digital JPG photographs should be submitted.

UF Policies:

University Policy on Accommodating Students with Disabilities: Students requesting accommodation for disabilities must first register with the Dean of Students Office (http://www.dso.ufl.edu/drc/). The Dean of Students Office will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation. You must submit this documentation prior to submitting assignments or taking the quizzes or exams. Accommodations are not retroactive, therefore, students should contact the office as soon as possible in the term for which they are seeking accommodations.

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 at http://www.dso.ufl.edu/students.php.

**Netiquette: Communication Courtesy: All members of the class are expected to follow rules of common courtesy in all email messages, threaded discussions and chats. [Describe what is expected and what will occur as a result of improper behavior – http://teach.ufl.edu/docs/NetiquetteGuideforOnlineCourses.pdf

Getting Help:

For issues with technical difficulties for E-learning in Sakai, please contact the UF Help Desk at:
- Learning-support@ufl.edu
- (352) 392-HELP - select option 2
- https://lss.at.ufl.edu/help.shtml

** Any requests for make-ups due to technical issues MUST be accompanied by the ticket number received from LSS when the problem was reported to them. The ticket number will document the time and date of the problem. You MUST e-mail your instructor within 24 hours of the technical difficulty if you wish to request a make-up.

Other resources are available at http://www.distance.ufl.edu/getting-help for:
- Counseling and Wellness resources
- Disability resources
- Resources for handling student concerns and complaints
- Library Help Desk support

Should you have any complaints with your experience in this course please visit http://www.distance.ufl.edu/student-complaints to submit a complaint.

Disclaimer: *This syllabus represents 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.*