Cover Sheet: Request 12080

Reduce CHs for DCP 4945 Geodesign Practicum 1 from 6 to 5

| Info | |
|----------------|---|
| Process | Course Modify Ugrad/Pro |
| Status | Pending at PV - University Curriculum Committee (UCC) |
| Submitter | Margaret Carr mcarr@ufl.edu |
| Created | 11/20/2017 4:00:54 PM |
| Updated | 12/21/2017 10:50:01 AM |
| Description of | We request a reduction in the credit hours associated with this course from 6 to 5. Additionally, |
| request | contact hours will be reduced to six. |

Actions

| Step | Status | Group | User | Updated | | | | | | |
|--|---------------------|---|---------------|--|------------|--|--|--|--|--|
| Department | Approved | DCP - Design, Construction and Planning 011501000 | Margaret Carr | | 11/20/2017 | | | | | |
| No document changes | | | | | | | | | | |
| College | Recycled | DCP - College of Design, Construction and Planning | Margaret Carr | Please make the changes suggested by the DCP curriculum committee and resubmit. | 12/6/2017 | | | | | |
| No document changes | | | | | | | | | | |
| Department | Approved | DCP - Design, Construction and Planning 011501000 | Margaret Carr | | 12/7/2017 | | | | | |
| DCP 4945 Geo | design Pract | ticum 1_syllabus_50 | CH.docx | 1 | 12/7/2017 | | | | | |
| College | Approved | DCP - College of Design, Construction and Planning | Margaret Carr | | 12/21/2017 | | | | | |
| No document c | hanges | | | | | | | | | |
| University Curriculum Committee | Pending | PV - University Curriculum Committee (UCC) | | | 12/21/2017 | | | | | |
| No document o | hanges | | | 1 | | | | | | |
| Statewide Course Numbering System | | | | | | | | | | |
| No document of | hanges | | | | | | | | | |
| Office of the Registrar | | | | | | | | | | |
| No document c | hanges | | | | | | | | | |
| Student Academic Support System | | | | | | | | | | |
| No document of | hanges | | | | | | | | | |
| Catalog | | | | | | | | | | |
| No document o | hanges | | | | | | | | | |
| College Notified | | | | | | | | | | |
| No document c | No document changes | | | | | | | | | |

Course|Modify for request 12080

Info

Request: Reduce CHs for DCP 4945 Geodesign Practicum 1 from 6 to 5 Description of request: We request a reduction in the credit hours associated with this course from 6 to 5. Additionally, contact hours will be reduced to six. Submitter: Margaret Carr mcarr@ufl.edu Created: 12/7/2017 12:17:18 PM Form version: 3

Responses

Current PrefixDCP Course Level4 Number 945 Lab Code None Course Title Geodesign Practicum 1 Effective Term Fall Effective Year 2018 Requested Action Other (selecting this option opens additional form fields below) Change Course Prefix?No

Change Course Level?No

Change Course Number?No

Change Lab Code?No

Change Course Title?No

Change Transcript Title?No

Change Credit Hours?Yes Current Credit Hours6 Proposed Credit Hours5 Change Variable Credit?No

Change S/U Only?No

Change Contact Type?No

Change Rotating Topic Designation?No

Change Repeatable Credit?No

Change Course Description?No

Change Prerequisites?No

Change Co-requisites?No

RationaleThis change is requested to provide sufficient elective opportunities in the upper division to allow students to take advantage of 3 combined degree programs offered by the DCP.

DCP 4945 Geodesign Practicum 1

Professors: P. Carr (mcarr@ufl.edu), P. Zwick (<u>pdzwick@ufl.edu</u>)
Graduate Teaching Assistant:
5 credits, M 7 - 9 ARC 411 R Periods 8 - 9 ARC 411
Prerequisites – DCP 2002 GIS II and URP 4230 3D Modeling, Visualization and Simulation

SYLLABUS

General

Course Description

This course provides students with hands on 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. 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.

Course Objectives

Problem solving will be addressed through the application of principles and techniques from:

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

Student Learning Outcomes

At the end of the course students should be able to:

- Prepare a regional suitability analysis
- Apply model builder for the development of a suitability analysis and as a tool to explain their analysis methodology
- Generate a plan or design based on principles of environmental planning and design, informed by class generated suitability analyses.

Problem Statement

Each semester a geographic area will be selected to serve as the project area.

Performance and Grading

Course Schedule:

| WEEK | ΤΟΡΙϹ | | | | | | | | |
|-------|---|--|--|--|--|--|--|--|--|
| | Introduction to Suitability Analysis | | | | | | | | |
| 1 | _History | | | | | | | | |
| | _A systems approach to analysis | | | | | | | | |
| | Introduction to GIS Data through FGDL for Land Use Modeling | | | | | | | | |
| | _Basic GIS data types and storage | | | | | | | | |
| 2 | _Parcel data | | | | | | | | |
| | _Agricultural data | | | | | | | | |
| | _Natural resource data | | | | | | | | |
| З | Using Goals and Objectives | | | | | | | | |
| 5 | _Organization of Goals and Objectives | | | | | | | | |
| 4 -8 | Tools for Raster Suitability Analysis | | | | | | | | |
| | _Single Utility Assignment | | | | | | | | |
| | Intro/review of critical analysis functions | | | | | | | | |
| | _Deriving modeling assumptions from existing patterns | | | | | | | | |
| | _Multiple Utility Assignment | | | | | | | | |
| 9 | Presentations of objectives and sub-objectives for agriculture, | | | | | | | | |
| | conservation and urban land uses. | | | | | | | | |
| | Developing Final Suitability Analyses | | | | | | | | |
| 10-11 | _Results for final goals | | | | | | | | |
| | _Final suitability results | | | | | | | | |
| 12 | Presentations of Final Suitability Analyses | | | | | | | | |
| | Individual Research Projects | | | | | | | | |
| 12 15 | _Proposal Preparation | | | | | | | | |
| 10 10 | _Work Plan | | | | | | | | |
| | _Midpoint presentations | | | | | | | | |
| 16 | Final Presentations | | | | | | | | |

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.

| Assignments | Estimated Dates | Percent of Grade |
|---|-----------------|------------------|
| Assignment One – Students will be asked to | Weeks 1 - 2 | 10% |
| research available GIS data sources and to | | |
| ascertain which sources are most | | |
| appropriate for the analyses to which | | |
| they've been assigned. | | |
| Assignment Two – Prepare analysis for | Weeks 4 - 9 | 40% |
| objectives and sub-objectives for | | |
| agriculture, conservation and urban land | | |
| uses. | | |
| Assignment Three – Prepare final | Weeks 10 - 12 | 25% |
| suitabilities for agriculture, conservation and | | |
| urban land uses. | | |
| Assignment Four Option 1 – Explore land | Weeks 13 - 16 | 25% |
| 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) | | |

Grading Scale

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

| Letter Grade | Α | A- | B+ | В | В- | C+ | С | C- | D+ | D | D- | Е |
|---------------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| 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 |
| Grade 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 |

For greater detail, see the Registrar's Grade Policy regulations at https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx

Attendance/Late Work and Make-up Work

Students will be allowed three unexcused absences without penalty. Each additional unexcused absence will result in the loss of 5% of points used to calculate the final grade. An unexcused absence is one that fails to satisfy the criteria of an acceptable absence, per UF policy which can be found at https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx.

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.

Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at: https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx

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, via course reserves or on the share 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/FI-working-landscapesFinal2011.pdf Florida Forever Needs Assessment http://www.fnai.org/FIForever.cfm Bureau of Economic and Business Research Information http://www.bebr.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

Other

E-learning

For issues with technical difficulties for E-learning, please contact the UF Help Desk at:

- Learning-support@ufl.edu
- (352) 392-HELP
- 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.

Academic Honesty

As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: *"We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of*

honesty and integrity. "You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit 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." It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see: http://www.dso.ufl.edu/SCCR/honorcodes/honorcode.php"

Disabled Students requesting Accommodations

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, <u>www.dso.ufl.edu/drc/</u>) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester, but no later than week 4.

Counseling Resources

Students experiencing crisis or personal problems that interfere with their general wellbeing are encouraged to utilize the university's counseling resources. <u>http://www.counseling.ufl.edu/cwc/Default.aspx</u>, 392-1575. Please call the University Police Department: 392-1111 or 9-1-1 for emergencies.

Online Course Evaluation

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at https://evaluations.ufl.edu. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at <u>https://evaluations.ufl.edu/results/</u>.

Disclaimer

This syllabus represents our 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.