COMPUTERS IN LANDSCAPE ARCHITECTURE:
INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEMS
LA 415/ 515

Department of Landscape Architecture
School of Architecture and Allied Arts
University of Oregon

Winter 2016
4 Credits

T/Th 2:00 p.m. – 3:50 p.m.
442 McKenzie Hall (SSIL computer lab)
and 222 Lawrence Hall

Instructor: Chris Enright, cenright@uoregon.edu
GTF: Krisztian Megyeri, kmegyeri@uoregon.edu

Course Description
In this course students are introduced to the use of GIS for the representation, planning and design of landscapes. The course provides a foundation in the use of vector and raster tools in ESRI's ArcMap software and an introduction to ArcScene's 3D capabilities from the perspective of the discipline of Landscape Architecture.

Course Format
The general format of the class will be instruction and demonstration of the software and discussions about the use of the software during the first hour and, individual or small group work sessions during the second hour. Discussions during the first hour include open class discussions about assigned readings as well as topics that arise as students are learning to use the software. The work sessions allow students time to work on assignments with time for individual guidance from the Instructor and GTF.

Course Objectives
Students are expected to gain the following skills during the quarter:

Facility with ArcMap's graphic tools for creating basic landscape representation maps

A basic understanding of working with vector and raster file formats in GIS

The use and application of fundamental vector and raster analysis tools in GIS

The use of other software programs, specifically Excel and Illustrator, as part of workflow using GIS

The ability to generate 3D landscape representations using GIS

An understanding of the appropriate use of GIS in landscape analysis and design

Requirements/ Grading

This class can be taken for a grade or Pass/ No Pass. The majority of the work is individual but the class includes short term group assignments. Active class participation, class assignments, quizzes, formal and informal student presentations and the final project will provide the framework for student evaluation. _All assignments must be satisfactorily completed to receive a passing grade in the class._

Grades will be based on successful completion of the following:
- 15% Attendance, class participation and participation in reading discussions
- 10% Quizzes
- 50% Assignments
- 25% Final project (individual)

Location

The course will meet in room 222 Lawrence Hall for the first and last sessions and use the computer lab in room 442 McKenzie Hall for all other class sessions.

The class divides broadly into 4 parts:

1st part   Intro to GIS: Lectures and presentations introducing ArcGIS software and its cartographic uses

2nd part   Intro to Vector Query and Analysis Tools

3rd part   Intro to Raster Tools and Analysis and 3D Representation

4th part   Final project: In the final project, students will use skills acquired during the quarter to complete and present a suitability analysis. Students are expected to use class time to work towards completion of this project.

Plan to spend time on the Final Project - February 19th through March 3rd

Anytime you have a question in class, stop me and ask.

The University of Oregon is working to create inclusive learning environments. If there are aspects of the instruction or design of this course that result in barriers to your participation, please notify me as soon as possible. You are also welcome to contact the Accessible Educational Center in 164 Oregon Hall at 346-1155 or uoaec@uoregon.edu.