NRE 687: Landscape Planning + Analysis Studio

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Jing’s office hours Wednesday Noon-1pm in Third Year Studio

Office hours by appointment (preferable immediately before or after class times)

Course Overview

The Landscape Planning + Analysis Studio is a core studio in the landscape architecture curriculum. This course provides an opportunity to develop critical thinking, design, and technical skills needed to excel at landscape planning and analysis projects across a variety of spatial scales. Course projects will encourage an understanding and application of scientific theory, data synthesis, contextual sensitivity, as well as creative design expression.

In addition, this course will provide connections to professional practice by linking studio work to real world projects and critical present day issues. Course projects are structured to foster a strong work ethic, effective project scoping, and interdisciplinary collaboration.

Relevant Theory, Practices, and Influences

- Processes, frameworks, and approaches for tackling landscape analysis + planning projects, including alternative futures, GeoDesign, and suitability analyses.
- Scientific theory, practices and research in the field of landscape ecology.
- Hierarchy theory and methods for working across spatial scales.
- The social and human dimensions of landscape pattern and process, including visual preference and other public engagement methods.

Relevant Technical Practices + Skills

- Project definition, scoping, and planning
- Data mining, collection, and validation
- Scientific research and application
- Digital tools, including ArcGIS, Adobe Suite, and others
- Suitability analysis
- Vector + raster data manipulation and synthesis
- Model building
- Scenario design
- Land use modeling and allocation
- Indicators and metrics development
- Public engagement approaches
- Presentation and graphic communication effectiveness
- Critique and critical thinking

Critical Issues to Explore

- Changing landscapes – urban ecology, habitat connectivity, invasive species, biodiversity
- Green infrastructure – stormwater management, urban forestry, parks and natural areas, non-motorized systems, energy systems, utility systems
- Urban regeneration – suburban transformations, reversing blight, adaptive reuse, innovative land use strategies
- Climate change – impacts across scales, predictive modeling
Course Methods + Approaches

Course Methods + Approaches

- **Course Projects** – This studio will focus on two main projects over the course of the semester. These projects will build on one another in terms of the skills, design process, and effectiveness of analysis. In addition, the projects will become increasingly self-directed over the course of the term, allowing you to explore issues and geographies that are of interest to you.

- **Exercises** – Shorter exercises will be incorporated throughout the course to provide key skills development.

- **Research** – Research will be essential to building effective and valid projects. There will be an expectation that all project works and course work incorporate appropriate research and inquiry into the project to support your studio project’s assumptions, claims, and analysis.

- **Readings + Discussion** – Targeted readings and class discussions will be used to dissect critical research, white papers, and other content important to landscape planning + analysis. Readings will be provided and in addition a number of books will be used throughout the course. Physical copies of the books and a limited number of photocopies will be made available.

- **Collaborative Feedback** – Course projects will be individual projects. However, projects and exercises will require peer critique, collaborative brainstorming, and other opportunities to engage your peers.

- **Guest Lecturers** – Guest lecturers will provide diverse perspectives and insight into leading analysis and planning issues, trends, and practices.

- **Professional Practice** – The course will take advantage of available landscape architecture and planning professionals to provide feedback on student work.

Course Work + Grades

*** With the upcoming 2014 accreditation of the SNRE LA program, we will require copies of all student work from the term. CTOOLS site will be used to collect assignments in a digital format, which may necessitate scanning your work.

Course grades will be determined based on the following percentages.

- 15% - Exercises
- 20% - Project #1
- 25% - Project #2 Part I
- 35% - Project #2 Part II
- 5% - Engagement

Working with ArcGIS and related spatial analysis tools can be challenging and at time frustrating. Regardless of your initial skills levels, grading leans on students demonstrated continued improvement in the application of tools and techniques as well as increased sophistication and thoroughness of analysis. Each project will be evaluated based on the following: appropriateness and depth of analysis; incorporation of relevant research and reading materials; continued advanced in process and methods; clarity and effectiveness of communication, sensitivity and contextual awareness,

Course Projects (Subject to Modification)

**Project 1 – Landscape Evaluation**
Use provided and additional collected data to build a landscape assessment metric or suitability, integrating a variety of data to create novel characterizations, classification layers, or evaluation approaches for the study area.

**Project 2 – Alternative Futures & GeoDesign**
Project two will a self-directed project with students choosing a topic and geography of interest to explore Alternative Future scenarios. This project will be split into two parts. The first part will focus on study design, scoping, and develop a framework for developing alternative futures and a relevant analysis to provide insight on a planning problem. Part two will focus on the analytical and technical process of the analysis.