

## GeoDesign

**Dr. Ming-Chun Lee Ming-  
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Thursdays 10-12:30  
online synchronous**

### Course Introduction

GIS is a collection of hardware, software, and data for managing, visualizing, and analyzing geographic information. Design is a process for arranging physical elements in such a way as to best accomplish a particular purpose. GeoDesign brings GIS into the design process in the context of built environments.

Under this GeoDesign framework, this course aims to provide students with practical skills for analyzing complex phenomena (economic, environmental, and social) in metropolitan areas. Students will explore the functionality of GIS as an effective tool for analyzing complex spatial relationships within man-made environments and further refining their planning/design solutions based on knowledge learned from spatial analysis processes. In addition, students will also explore ways to better integrate GIS with other digital visualization programs for effective presentations and communications—a useful skill for forging better working relationships with clients/community.

### Course Structure

This is a GIS course organized in a mini-studio format. Throughout the semester, students will work on a real-world community planning/design project, through which students learn how to utilize GIS and other digital (analytical/visualization) tools to better analyze, communicate, and visualize issues facing the community.

### Optional Text

ESRI, Getting to Know ArcGIS Desktop; for ArcGIS 10.3

Selected articles and book chapters will be provided as examples to help you structure and organize your project.

### Evaluation

The final grade will be calculated on the following—

- 50% Weekly lab tutorials and class participations
- 20% Mid-term presentation
- 30% Final presentation/Report

