# CEL 9013: Spatial Analysis and Modeling

## 1. Instructor

XiaoHang Liu, Ph.D.
Department of Geography & Environment
Tel: 415-338-7509
Email: xhliu@sfsu.edu

## 2. Description

The objective of this course is to familiarize students with concepts and functions available vector-based spatial analysis to analyze and manipulate spatial data. Topics include selection and query, proximity analysis, overlay analysis, model builder, and other geoprocessing functions. Class format: approximately 50% lecture, 50% lab exercises.

## 3. Schedule

### Friday

| | |
|---|---|
| 8:30 – 9:00 | Introduction |
| 9:00 – 10:00 | Lecture 1: Selection and Query |
| 10:00 – 11:30 | Lab1 |
| 11:30 – 12:00 | Lecture 2: Spatial Operators |
| 12:00 – 1:00 | Lunch Break |
| 1:00 – 2:30 | Lab 2 |
| 2:30 – 3:30 | Lecture 3: Proximity Analysis |
| 3:30 – 5:30 | Lab3 |

### Saturday

| | |
|---|---|
| 8:30 – 10:00 | Lecture 4: Overlay |
| 10:00 – 11:30 | Lab4 |
| 11:30 – 12:30 | Lecture 5: Other Tools |

| | |
|---|---|
| 12:30 – 1:30 | Lunch Break |
| 1:30 – 3:00 | Lab 5 |
| 3:00 – 4:00 | Lecture 6: Modelling |
| 4:00 – 5:00 | Lab6 |
| 5:00 – 5:30 | Course wrap up |