

Spatial Analysis and Modeling

Michael Treglia

Landscape Analysis and Modeling

Course Number:

Instructor: Michael L. Treglia

Course Description: Understanding spatial relationships across landscapes can provide critical insight into evolutionary and ecological patterns and processes. This course will focus on quantifying spatial relationships, using spatial interpolation techniques to estimate environmental variables at unmeasured points, and modeling connectivity across landscapes. The course will take advantage of powerful free and open source software for GIS and statistical analyses.

NEED TO IMPROVE THIS A LOT!!!

Landscape Analysis and Modeling* will focus on understanding spatial relationships among

Points	Item
5	Participation

- Theory/background:
- What students should expect to learn
- What tools will be used In *Landscape Analysis and Modeling* we w

Schedule

Week 1: Intro to GIS and Landscape Ecology

Day 1

Assignment Due: None

- Readings:
 - None
- Agenda:
 - Introductions
 - Logistics
 - Lecture: Introduction to GIS and Landscape Ecology

Day 2

Assignment Due:

- Readings:
 - [Wiens, J.A., 1989. Spatial scaling in ecology. **Functional Ecology** 3, 385-397.](#)
- Agenda:
 - Paper Discussion
 - Exploring QGIS

Week 2

Week 3

Week 4

Week 5

Week 6

Week 7

Week 8

Week 9

Week 10

Week 11

Week 12

Week 13

Week 14

Week 15