

Geostatistical Modeling of Spatial Data

Lectures: Mondays & Wednesdays 3:30pm - 5:00pm; Ellison 5824

Lab: Friday 4:00am - 6:00pm; Ellison 2610

Instructor

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Office hours: Tuesday & Thursday 1:00 - 2:00pm; Ellison 5710

Audience & Prerequisites

Graduate students in Geography, Ecology, Environmental Science & Management, Geology, Marine Science and Statistics, interested in *spatial statistics*.

Prerequisites: Geog 210B, Geog 210C, or equivalent(s) and consent of instructor.

Text Book

Lecture notes are available at: www.geog.ucsb.edu/~phaedon/classes/geog278

Tentative Schedule

Date	Topic
09/29-10/01	Unconditional Stochastic Simulation (Single Continuous Variable)
10/06-10/08	Unconditional Simulation on Arbitrary Spatial Units
10/13-10/15	Unconditional Simulation (Multiple Continuous Variables)
10/20-10/22	Unconditional Simulation (Categorical Variables)
10/27-10/29	(Co)Kriging with Known Attribute Mean
11/03-11/05	Change of Support & Areal Interpolation
11/10-11/12	Conditional Simulation of Continuous Variables
11/17-11/19	Conditional Simulation of Categorical Variables
11/24-11/26	Spatial Regression Models
12/01-12/03	Spatiotemporal Models

Topics may change depending on student interests

Logistics

Weekly Matlab-based lab assignments (60%), weekly review of research articles (20%), class participation (20%). Students are expected to work in teams of 2-3 people.