
COURSE OUTLINE

ADVANCED SPATIAL ANALYSIS

Office Hours: Mondays 1:00pm–2:00pm and by appointment (zoom links on Brightspace)
Contact: chrisbone@uvic.ca

Teaching Assistant: Jason Kelley
Office Hour: Thursdays 11:00am–12:00pm (zoom links on Brightspace)
Contact: jkelly@uvic.ca

COURSE DESCRIPTION

This course introduces students to a variety of spatial analysis techniques that can be used for understanding geographic phenomena. Topics covered in this course include descriptive spatial analysis, spatial sampling, inferential spatial analysis, spatial interpolation, spatial correlation and geographic regression. Lectures focus on the geographic theory and equations behind each method, while labs

WEEKLY CALENDAR

WEEK	DATE	LECTURE TOPICS
WEEK 1	JAN 13	DESCRIPTIVE AND SPATIAL STATISTICS REVIEW
WEEK 2	JAN 20	INFERENCEAL STATISTICS REVEIW
WEEK 3	JAN 27	POINT PATTERN ANALYSIS
WEEK 4	FEB 3	K-FUNCTION AND KERNEL DENSITY ESTIMATION
WEEK 5	FEB 10	SPATIAL AUTOCORRELATION
WEEK 6	FEB 17	GLOBAL & LOCAL MORAN'S I
WEEK 7	FEB 24	READING BREAK
WEEK 8	MARCH 3	SPATIAL INTERPOLATION
WEEK 9	MARCH 10	KRIGING
WEEK 10	MARCH 17	SENSITIVITY ANALYSIS
WEEK 11	MARCH 24	ASSIGNMENT 5 SCOPING
WEEK 12	MARCH 31	OPEN SESSION FOR ASSIGNMENT ASSITANCE
WEEK 13	APRIL 7	OPEN SESSION FOR ASSIGNMENT ASSITANCE

ASSIGNMENT SCHEDULE

ASSIGNMENT 1: DESCRIPTIVE STATISTICS (10%)

Submission Due: January 27th @ 11:59 pm

Peer Assessment Due: February 3rd @ 11:59 pm

Feedback Due: February 8th @ 11:59 pm

ASSIGNMENT 2: POINT PATTERN ANALYSIS (15%)

Submission Due: February 10th @ 11:59 pm

Peer Assessment Due: February 17th @ 11:59 pm

Feedback Due: February 25th @ 11:59 pm

ASSIGNMENT 3: SPATIAL AUTOCORRELATION (20%)

Submission Due: March 3rd @ 11:59 pm

Peer Assessment Due: March 10th @ 11:59 pm

Feedback Due: March 15th @ 11:59 pm

ASSIGNMENT 4: SPATIAL INTERPOLATION (25%)

Submission Due: March 17th @ 11:59 pm

Peer Assessment Due: March 24th @ 11:59 pm

Feedback Due: March 29th @ 11:59 pm

ASSIGNMENT 5: BUILD YOUR OWN ADVENTURE (30%)

Submission Due: April 7th @ 11:59 pm

Peer Assessment Due: April 14th @ 11:59 pm

Feedback Due: April 19th @ 11:59 pm

DISCLAIMER

The above schedule, policies, procedures, and assignments in this course are subject to change in the event of extenuating circumstances.

NOTE: