

GEOGRAPHY 457
(formerly Geography 547)
H(3-3) Area III

Geographic Information Systems II

Instructor: Dr. Shelley Alexander

Official Course Description:

The role of Geographic Information Systems in environmental (physical-human interactions) research and management is explored both theoretically and practically. Advanced analytical approaches will be examined within lecture and laboratories, focusing on applied-GIS techniques to address current environmental problems. Topics will relate to major issues within the environment/earth sciences field. Theoretical topics will include spatial modeling, surface and network analysis, applied and decision support statistics (including chi-square and regression statistics, multiple criteria evaluation and Bayesian decision support), and dynamic GIS. Practical applications of these concepts will range from wildlife habitat analysis (e.g. wolf resource selection and probability modeling) to urban landscape change (e.g. using cellular automata to predict urban growth). Arc-GIS will be the primary software used in lab exercises, and students will be introduced to other relevant GIS and statistical packages (e.g. Idrisi GIS and SPSS).

Prerequisite:

Geography 339 and one of 357 or 447 or consent of the Department

Supplementary Fees: *(field trips etc).* N/A

Text(s)/Readings:

Geographic Information Systems and Science, 2nd Edition, by Longely, Goodchild, Maquire and Rhind.

Grading (Weighting):

Labs (45%)

Presentation (15%)

Final Project, GIS Application (40%)

State whether: *There will be no final examination for this course OR. It is essential to pass all elements/components to pass the course as a whole.*

Grading System:

96-100	A+	77-80	B	59-61	C-
90-95	A	71-76	B-	55-58	D+
86-89	A-	65-70	C+	50-54	D
81-85	B+	62-64	C	0-49	F

For additional detailed course information posted by the Instructor see Blackboard at:
<http://blackboard.ucalgary.ca/>

Plagiarism

Academic dishonesty is not an acceptable activity at the University of Calgary and students are **strongly advised** to read the Student Misconduct section in the University Calendar. Quite often, students are unaware of what constitutes academic dishonesty or plagiarism. The most common are 1) presenting another student's work as your own 2) presenting an author's work or ideas as your own without proper referencing and 3) using work completed for another course. This activity will not be tolerated in this course and students conducting themselves in this manner will be dealt with according to the procedures outlined in the calendar.

Disability Resource Centre Accommodations

It is the student's responsibility to request academic accommodations. If you are a student with a documented disability who may require academic accommodation and have not registered with the Disability Resource Centre, please contact their office at 220-8237. Students who have not registered with the Disability Resource Centre are not eligible for formal academic accommodation. You are also required to discuss your needs with your instructor no later than fourteen (14) days after the start of this course.

Re: Posting of Grades and Picking-up of Assignments

- All assignments will be handles on Blackboard.
- Their own grades will be available to each student on Blackboard by password access. Grades will **not** be available at Geography's main office.

Contact Information for Student and Faculty Representation

- SU VP Academic Phone: 220-3911 and e-mail: suypaca@ucalgary.ca
- SU Faculty Rep. Phone: 220-3913 and e-mail: socialsciirep@su.ucalgary.ca

Campus Safewalk

Campus Security, in partnership with the Students' Union, provides the Safewalk service, 24 hours a day, to any location on Campus including the LRT, parking lots, bus zones and University residences. Contact Campus Security at 220-5333 or use a help phone, and Safewalkers or a Campus Security officer will accompany you to your Campus destination.