

COURSE OUTLINE: FALL 2008

GEO 437 H (2-3) AREA III

APPLIED MAPPING TECHNIQUES

Timetable	Lec	M W	9:00 – 9:50	ES 307
	Lab	W	14:00 – 15:500	ES 307

Instructor: Dr. Dan Jacobson

Office: ES 306

Office hours: T 13:00 -14:00 or by appointment

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TA: Dan Odell

Office: TBA

Office hours: TBA

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Official Calendar Description:

Beginning to end map production including rapid and high precision surveying techniques, digital data compilation and manipulation and advanced map design and production in paper and digital formats. This is a project-oriented course with field surveying exercised early in the session and computer-based projects later in the session.

Course Content:

Geography 437 covers production of maps from start to finish, digital data compilation and manipulation working with graphic and Geographic Information System (GIS) software (ESRI's ArcView, ArcGIS), Adobe Illustrator and other software, thematic map design theory and practice, communication theory for both physical and human geography, and final computer-based map production, including website development. The course is primarily project based, and includes hands-on map work in most sessions. This course focuses on the communication, theory, power and visualization aspects of mapping,

Lecture Topics:

Design process in mapping; cartographic communication and geographic visualization; generalization; scales and scale changes; vector and raster data handling; map projections; thematic maps; communication using colour and techniques appropriate to greyscale mapping; map production; new developments in cartography.

This will involve:

- Developing an advanced understanding in fundamental core concepts in cartography
- Exploring these concepts in a technical lab based setting
- Promoting critical thinking and reasoning with data in a spatial application based setting
- Developing methodologies and procedures for independent research projects
- Developing a web based project report

Context and wider aims of the course:

The goals are to integrate the wider theoretical background of Cartography with specific technical situations, and to explore these throughout the duration of the course, as they relate to specific applications or data.

Lab Activities and Student Projects:

Weekly lab activities will run for the first portion of the course. The purpose of the lab exercises is to

complement the material presented in the lectures, and to give students hands-on experience with cartographic data handling.

Required Texts:

Slocum, T. A.; McMaster, R.B.; Kessler, F.C.; Howard, H. H. (2009)
Thematic Cartography and Geographic Visualization, 3rd Edition, Upper Saddle River, NJ, Prentice Hall, ISBN: 9780132298346

Readings/Manual: Additional readings, laboratory manual and links to electronic resources will be available on Blackboard.

Blackboard: <http://blackboard.ucalgary.ca/>

Grading (Weighting)

There is no final examination for this course and therefore will not be scheduled by the Registrar's Office. It is not essential to pass *all* elements/components to pass the course as a whole; however each element of the course is closely inter-related. It *is* necessary to pass the project as a whole.

Students will be evaluated in three areas: (1) their knowledge of lecture materials, including classroom participation and discussion (2) laboratory work, and (3) the term project. The Final project is expected to demonstrate knowledge of the conceptual issues and research applications in cartography. The application of this knowledge will be evaluated through laboratory exercises and individual research projects. The distribution of marks will be:

Class participation exercises	10%
Laboratory exercises:	40% (4 x 10%)
Project:	50%
Comprised of:	
Proposal:	10%
Sketch map (graphic outline)	10%
Product and Report:	20%
Web based report:	10%

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

Prerequisite: GEOG 231; plus either GEOG 333 or GEOG357 or consent of the Department.

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 [in GEOG437 students are encouraged to coordinate map production with paper or project work in another course, with consent of the other instructor]. 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

- Grading and assignment evaluations will be available in the secure Blackboard environment
- 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: suvpaca@ucalgary.ca
- SU Faculty Rep. Phone: 220-3913 and e-mail: socialscirep@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.