#### **GEO 437 H (2-3) AREA III**

Updated: 8/22/06

## APPLIED MAPPING TECHNIQUES

**Timetable** Lec T 8:00 – 10:00 ES 307 **Catalogue # 1078** 

Lab W 13:00 – 16:00 ES 307

Instructor: Dr. Dan Jacobson TA: Shawn Mueller

Office: ES 418 Office: TBA

Office hours: R 2:00 -3:00 or by appointment
Phone: 220-6192
Office hours: TBA
Phone:

e-mail: dan.jacobson@ucalgary.ca e-mail: sjmuelle@ucalgary.ca

#### **Course Content:**

Geography 437 covers production of maps from start to finish, including both rough and precision surveying, digital data compilation and manipulation working with Geographic Information System 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 visulaization 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 sptail application based setting
- Developing methodologies and procedures for independent research projects

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

<sup>\*</sup>subject to change before classes officially start.

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

**Required Texts:** Slocum, T. A.; McMaster, R.B.; Kessler, F.C.; Howard, H. H. (2005) Thematic Cartography and Geographic Visualization, 2<sup>nd</sup> Edition, Upper Saddle River, NJ.

Prentice Hall, ISBN: 0130351237

**Readings/Manual:** Additional readings, laboratory manual and links to electronic resources will be made available during the course period, via Blackboard.

#### **Grading (Weighting)**

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

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 demonstate knowledge of the conceptual issues and research applications in GIS. The application of this knowledge will be evaluated through laboratory exercises and individual research projects. The distribution of marks will be:

Laboratory exercises: 40% (4 x 10%)

Project: 60%

Comprised of:

Proposal: 10%
Sketch map (graphic outline) 10%
Product and Report: 30%
Web based report: 10%

#### **Grading System:**

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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:** Geography 201; and Geography 333 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.

## Re: Posting of Grades and Picking-up of Assignments

- Assignments will be handed back only in class or by the Professor at pre-arranged time(s).
- Grading and assignment evaluations will be available in the secure Blackboard environment
- Posting of grades will be at the discretion of each Professor and, if posted, they will be scrambled. <u>Grades will not be available at Geography's main office</u>.

## **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.