

GEOGRAPHY COURSE OUTLINE: WINTER 2015 Geog 437 H (3-3)

Cartography and Geographic Visualization

Section	Days	Time	Location
LEC 01	TuTh	5:00pm - 6:15pm	ES 342
LAB 01	Tu	8:00am - 10:45am	ES 307

Instructor: Dan Jacobson	Office: ES 306
Telephone: 220 6192	Email: dan.jacobson@ucalgary.ca
TA: Anne Rozek	Email: arozek@ucalgary.ca
Technical Lab Support: Bart Hulshof	Office: ES 402
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Cartographic support: Robin Poitras	Office: ES 424
Email: rpoitras@ucalgary.ca	

Please note: The appropriate emergency evacuation assembly point for all classes taught in Earth Sciences is ICT Food Court.

Course Description

The role of cartography and geographic visualization is explored both theoretically and practically in the communication of spatial data. Topics will relate to major issues in advanced map design and spatial data interaction with examples from the geographic literature. Sample approaches will be critically examined within lecture and laboratories. Computer software packages will be used for laboratories.

Prerequisites

Geography 231, plus either Geog 333 or 357 or consent of the department.

Course Preparation:

This course assumes that students have a general understanding of mapping, cartography and geographic representation. Students should be familiar with manipulating data in a standard geographic information system such as ESRI ArcGIS. Experience with other graphic design packages such as Adobe Illustrator is advantageous. At least one advanced undergraduate-level course in GIS is strongly recommended.

Course Objectives:

This course focuses on the communication, theory, power and visualization aspects of mapping. The course provides an overview of the production of maps from start to finish; digital data compilation and manipulation; working with graphic and Geographic Information system (GIS) software (e.g. ESRI's ArcGIS), Adobe Illustrator and Map Publisher; thematic map design theory and practice; communication theory for both physical and human geography; geovisualization and final computer-based map production, including website development.

Lab Assignments:

Students will undertake a series of lab assignments designed to provide hands-on experience cartographic design, information communication and data handling. The lab assignments will explore issues core concepts in cartographic analysis and geovisualization. All assignments <u>must</u> be submitted using the Desire2Learn (D2L) system. <u>Email submissions will not be accepted</u>.

Term Project:

All students will complete a term project due the last day of lectures (15 April 2015). The goal of each project is to create a complex cartographic product. Detailed term project guidelines will be provided to students' mid-way through the course. All projects <u>must</u> be submitted using the D2L system. Email submissions will not be accepted.

Required texts:

Kraak, J., & Ormeling, F. (2010). *Cartography: Visualization of Spatial Data* (3rd ed.). New York: Guilford Publication.

The text below is **recommended** as a general reference resource.

Slocum, T. A.; McMaster, R.B.; Kessler, F.C.; Howard, H. H. (2005 / 2009) Thematic Cartography and Geographic Visualization, 2nd or 3rd Edition, Upper Saddle River, NJ, Prentice Hall,

Evaluation:

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 term 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:

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Laboratory exercises (4) Term Project		50% 40%	(see assignment schedule on D2L) (see assignment schedule on D2L)
Comprised of:			,
Written Proposal	5%		(see assignment schedule on D2L)
Sketch map (graphic outline)	5%		(see assignment schedule on D2L)
Project Presentation	10%		(see assignment schedule on D2L)
Product & Report	20%		(due last day of lectures)
Participation		10%	

Note: It is not necessary to pass each course component in order to pass the course. However each element of the course is closely inter-related.

There is no final exam scheduled for this course.

Assignments

All assignments must be submitted by the specified due date and time

The only acceptable reasons for missing and examination or assignment in this class, as listed in the Deferral of final Examinations section of the University of Calgary Calendar are illness, domestic affliction or religious conviction. If you miss an assignment or examination and you provide me with the appropriate documentation, you will have one opportunity to make arrangements for the missed work. Without appropriate documentation, you will receive a zero for that portion of your grade.

Grading System:

96-100 A+	77-80 B	59-61 C	<u>;</u> –
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 Desire2Learn at https://d2l.ucalgary.ca/d2l/home

USRI

At the University of Calgary, feedback provided by students through the Universal Student Ratings of Instruction (USRI) survey provides valuable information to help with evaluating instruction, enhancing learning and teaching, and selecting courses (www.ucalgary.ca/usri). Your responses make a difference - please participate in USRI Surveys.

Writing across the Curriculum

Writing skills are not exclusive to English courses and, in fact, should cross all disciplines. The University supports the belief that throughout their University careers, students should be taught how to write well so that when they graduate their writing abilities will be far above the minimal standards required at entrance. Consistent with this belief, students are expected to do a substantial amount of writing in their University courses and, where appropriate, members of faculty can and should use writing and the grading thereof as a factor in the evaluation of student work. The services provided by the Writing Support Services can be utilized by all undergraduate and graduate students who feel they require further assistance.

Principles of Conduct

The University of Calgary Calendar includes a statement on the Principles of conduct expected of all members of the University community (including students, faculty, administrators, any category of staff, practicum supervisors and volunteers) whether on or off the University's property. This statement applies in all situations where the members of the University community are acting in their University capacities. All Members of the University Community have a responsibility to familiarize themselves with this statement which is available at: http://www.ucalgary.ca/pubs/calendar/current/j-2.html

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. http://www.ucalgary.ca/honesty/plagiarism

Student Accessibility Services Accommodations

If you are a student with a documented disability who may require academic accommodation and have not registered with Student Accessibility Services, please contact their office at 220-8237. Students who have not registered with Student Accessibility Services 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.

Freedom of Information and Protection of Privacy

FOIP: The Freedom of Information and Protection of Privacy (FOIP) legislation disallows the practice of having students retrieve assignments from a public place, e.g., outside instructor's office, the department office, etc. Term assignments will be returned to students individually, during class or during the instructor's office hours; if students are unable to pick up their assignments from the instructor, they provide the instructor with a stamped, self-addressed envelope to be used for the return of the assignment.

Re: Posting of Grades and Picking-up of Assignments

- All assignments will be handled through D2L or personally.
- Their own grades will be available to each student on D2L by password access. <u>Grades will</u> **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: arts1@ucalgary.ca

The students ombudsman office information can be found at:

http://www.su.ucalgary.ca/page/affordability-accessibility/su-structure/contact-info

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.

Faculty of Arts Program Advising and Student Information Resources

- Have a question, but not sure where to start? The new Faculty of Arts Students Centre is your information resource for everything in Arts! Drop in at SS 102, call us at 403-220-3580 or email us at ascarts@ucalgary.ca you can also visit the Faculty of Arts website at http://arts.ucalgary.ca/undergraduate which has detailed information on common academic concerns.
- For registration (add/drop/swap), paying fees and assistance with your Student Centre, contact Enrolment Services at (403) 210 7625 or visit them at the MacKimmie Library Block.

Contact for Students Union Representatives for the Faculty of Arts: arts1@su.ucalgary.ca, arts2@su.ucalgary.ca, arts3@su.ucalgary.ca, arts4@su.ucalgary.ca