

GEOG533 H (3-3)**RESEARCH AND APPLICATIONS IN REMOTE SENSING**

Timetable	Lec #01	TR	09:00-10:15	ES 653	Catalogue #	1662
	Lab #01	M	09:00-11:50	ES407		

Instructor: Mryka Hall-Beyer

Office: ES458

Office hours: T15-16h; W 10-11h

Phone: 220-6586

e-mail: mhallbey@ucalgary.ca**TA (if applicable): TBA**

Office:

Office hours:

Phone:

e-mail:

Course Content This seminar-based course will examine current research topics and techniques in remote sensing for geographical applications. These aspects will be examined in part through lectures, lab assignments, online discussions and student led remote sensing journal article presentations. Classroom discussions of reading assignments and presentations comprise a critical component of the course. Lab exercises will explore the technical aspects of some of the major topics using primarily PCI Geomatica and IDL/ENVI and eCognition. Final topics to be covered will be decided in consultation with students.

Major Topics (subject to change)

- Review of Remote Sensing Fundamentals and selection of topics
- Classifiers: Neural Nets, Object-Oriented, Decision Tree
- Systems development and fundamental issues
- Passive and active non-vir systems
- Scaling, image fusion, and compression
- Discriminant analysis, Harmonic analysis and other advanced processing techniques
- Atmospheric and oceanic remote sensing
- Labs: atmospheric correction, topography calculations and their integration into image interpretation, modelling, calibration, introduction to eCognition.

Blackboard: <http://blackboard.ucalgary.ca/> Choose W2005 GEOG533 M Hall-Beyer. Blackboard enrolment is automatic for everyone registered in the course.

Required Texts: None. Recommended text references will be listed on Blackboard. Students should have one or more standard remote sensing texts for reference.

Grading (Weighting)

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|--|---|------------------------|
| • Presentation and discussion of literature on topic of interest | = | 15 to 20% ¹ |
| • Critical Review of a RS Journal Article | = | 10% |
| • Final take-home exam in paper format | = | 15 to 20% ¹ |
| • 3 Lab Assignments (15 % each) | = | 45% |
| • Quality of participation in online discussion forum | = | 10% |

¹ Percent for these two items depends on student's role. They will total 35% for all students.

There is no Registrar-scheduled final examination for this course. Pass/fail will be determined by overall average, it is not essential to pass all elements to pass the course as a whole.

Prerequisite: Consent of the Department.

Grading System

96-100	A+	74-78	B	59-61	C-
88-95	A	70-73	B-	55-58	D+
84-87	A-	65-70	C+	50-54	D
79-83	B+	62-64	C	0-49	F

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 or *without proper referencing* and 3) using work completed for another course without prior arrangement and acknowledgement. Plagiarism 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. Students are encouraged to consult the professor if they have any doubt about proper procedure.

Re: Posting of Grades and Picking-up of Assignments

- All assignments will be submitted electronically and returned by the same route.
- Posting of grades will be entirely electronic, accessible by password only. Grades will **not** be available at Geography's main office nor the MGIS 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: 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.