

## GEOG 633 H (3-3)

## RESEARCH AND APPLICATIONS IN REMOTE SENSING

<b>Timetable</b>	Lec #01	TR	10:00	ES908	<b>Catalogue #</b>	<b>4431</b>
	Lab #01	T	14:00	ES415		

**Instructor:**

Greg McDermid  
 Office: ES428  
 Office hours: By appointment  
 Phone: 210-5422  
 Email: [mcdermid@ucalgary.ca](mailto:mcdermid@ucalgary.ca)

**Course Assistant:**

Chantal Hansen  
 Office: ES 415  
 Office Hours: T 14:00-16:00  
 Phone: N/A  
 Email: [cvhansen@ucalgary.ca](mailto:cvhansen@ucalgary.ca)

**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, instructor- and student- led topic of interest presentations, lab assignments, 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/or IDL/ENVI.

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

**Reference Materials:** There is no textbook required for this course. Students are expected to get the majority of their reference materials through scientific journals and the Internet. There are several good remote sensing textbooks that provide useful general reference materials, and students would be well-advised to gain access to one or more of the following:

Lillesand, T. M., R. W. Kieffer, and J. W. Chipman, 2003: Remote Sensing and Image Interpretation. Wiley.

Jensen, J. R., 2004: Introductory Digital Image Processing: A Remote Sensing Perspective. Prentice Hall.

Jensen, J. R., 2000: Remote Sensing of the Environment: An Earth Resource Perspective. Prentice Hall.

Berlin, G. L. and T. E. Avery, 2004: Fundamentals of Remote Sensing and Airphoto Interpretation. Prentice Hall.

**Grading (Weighting):**

1. Four Laboratory Assignments (5, 10, 10, and 15%)	
Download and Integration of EOS Data	5%
Radiance, Reflectance, and Atmospheric Correction	10%
Multiscale Information Extraction	10%
RADAR Polarimetry	15%

2. Two Presentations	
Remote Sensing Topic of Interest	10%
Critical Review of Journal Article	10%
3. Two Term Tests (15% each)	30%
4. Class Participation	10%

*Note: it is not necessary to pass each course component in order to pass the course.*

### 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

### 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.

### 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).
- To receive your assignment back via mail, please include an appropriately sized self-addressed, stamped envelope with your assignment when handing in to the professor.
- Posting of grades will be at the discretion of each Professor and, if posted, they will be scrambled. 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](mailto:suvpaca@ucalgary.ca)
- SU Faculty Rep. Phone: 220-3913 and e-mail: [socialscirep@su.ucalgary.ca](mailto: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.