

# Department of Geography

## Course Outline

### Geography 228 - Introduction to Remote Sensing Fall 2014

<b>Instructor</b>	Olaf Niemann ( <a href="mailto:olaf@uvic.ca">olaf@uvic.ca</a> ) Office: David Turpin Building A246 (office hours by arrangement)
<b>Lecture Hours</b>	Monday, Wednesday @ 1430-1520
<b>Lecture Location</b>	David Turpin Building A110
<b>Course Objectives</b>	To provide students with a conceptual and practical introduction to remote sensing data, processing, and interpretation/use.
<b>Textbook</b>	<b>Introductory Digital Image Processing. A Remote Sensing Perspective.</b> <i>John R. Jensen.</i> (Can be purchased at the UVic Bookstore)
<b>Course website</b>	There will be a course website where all of the course material will be provided: <a href="http://www.geog.uvic.ca/rs228">http://www.geog.uvic.ca/rs228</a> Login: geog228 PW:meris
<b>Lab Assignments</b>	All labs will be held in the Geomatics labs SSM A251/253.  All assignments will be due at the time stipulated on the lab assignment handout. Penalties for late assignments are significant: <b>10% for the first 24 hour period day followed by 25% every 24 hour period after (no partial penalties).</b>  <b>All lab assignments must be submitted to be allowed to sit the final examination. Failure to submit a lab assignment will result in a</b>

**failing grade of incomplete (N).** Exceptions will only be granted for medical reasons (requiring a written report from a medical practitioner stating your inability to attend class) or extreme personal crises. Only the course instructor can grant exceptions. Please do not try to negotiate exceptions with your TA.

**Grading**

The grade breakdown for the course is as follows:  
Section A: **Exams: Midterm - 25%, Final 35%**  
Section B: **Lab Assignments: 40%**

To obtain a passing grade in the course you will be required to obtain a passing grade in both sections **A AND B**

The grade breakdown follows the university convention:

F	D	C	C+	B-	B	B+	A-	A	A+
< 50%	50-59%	60-64%	65-69%	70-72%	73-76%	77-79%	80-84%	85-89%	90-100%

**Lab Access**

The Geomatics Teaching Laboratory (Social Sciences & Math A251/A253) is open daily from 8.30 am to 4.30 pm. Access to the Laboratory is restricted after 4.30 pm for Security purposes. You are encouraged to purchase an entry card, which will enable you to gain access to that facility after hours. The cost of a card is \$10.00 and you can keep it in case you take another course that uses the lab facilities.

**Course materials**

All course materials (with the exception of the Textbook) will be available through *the course website*.

## ***Tentative Lecture Schedule***

### ***September***

Week of September 1

3: Intro Class

Week of September 8

8: Introduction to Remote Sensing

10: Introduction to Remote Sensing

Week of September 15

15: Remote Sensing Systems

17: Electromagnetic Spectrum

Week of September 22

22: API - Aerial Photography

24: Aerial Photography

Week of September 29

29: Film/filters

(Oct 1): Statistics 1

### ***October***

Week of October 6

6: Midterm review?

8: Midterm?

**Week of October 13**

**13: Thanksgiving**

15: Image Processing 1

Week of October 20

20: Image Processing 2

22: Image Preprocessing 3

Week of October 27

27: Image Enhancements 1

29: Image Enhancements 2

### ***November***

Week of November 3

3: Image Enhancements 3

5: Image Classification 1

**Week of November 10**

## **Reading Break**

Week of November 17

17: Image Classification 2

19: Open/Guest lecture

Week of November 24

24: Examples of emerging remote sensing technologies

26: Course review