

**Geog 228 – Introduction to Remote Sensing  
January 2022****Territory acknowledgement**

We acknowledge with respect the Lekwungen peoples on whose traditional territory the University of Victoria stands, and the Songhees, Esquimalt and W̱SÁNEĆ peoples whose historical relationships with the land continue to this day.

TO JOIN THE LECTURE, click on the following link:

ZOOM CLASSROOM ETIQUETTE: *Audio*: Please keep your microphone off unless you are asking a question during the question period. This greatly helps with sound quality and avoids audio feedback. *Video*: Please keep your video off. In general, if we act the same way as we would in a real classroom, we should be fine.

<b>Course Objectives</b>	To provide students with a conceptual and practical introduction to Remote Sensing, including aerial photography, different satellite platforms, and digital processing of satellite imagery.
<b>Instructor</b>	Maycira Costa ( <a href="mailto:maycira@uvic.ca">maycira@uvic.ca</a> )
<b>Office Hours</b>	Wednesdays from 1:00 pm-2:00 pm We can set-up personal appointments if this schedule does not work for you. Please, send me an email: <a href="mailto:maycira@uvic.ca">maycira@uvic.ca</a>
<b>Lectures</b>	Tuesday 9:30pm – 10:20pm Wednesday 9:30pm – 10:20pm
<b>Lab coordinator</b>	Terri Evans ( <a href="mailto:tevans@uvic.ca">tevans@uvic.ca</a> )
<b>Lab Office Hours</b>	TBA: Will post to Brightspace when this information becomes available
<b>Late Assignment Policy</b>	Lab assignments are due at the beginning of the following week's lab. The penalty for assignments handed in late is <b>20% per day</b> every day after. <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 failing grade of incomplete (N).</b> Exceptions will only be granted for medical reasons (requiring a written report from a medical practitioner stating your inability to attend the class) or

extreme personal crises. Only the course instructor can grant exceptions.

## Course Evaluations

Component A		Component B	
Mid-term Exam	25%	Lab assignments	40%
Final Exam	35%		

## GRADING SYSTEM

As per the Academic Calendar:

Grade	Grade point value	Grade scale	Description
A+	9	90-100%	<b>Exceptional, outstanding and excellent</b> performance. Normally achieved by a minority of students. These grades indicate a student who is self-initiating, exceeds expectation and has an insightful grasp of the subject matter.
A	8	85-89%	
A-	7	80-84%	
B+	6	77-79%	<b>Very good, good and solid</b> performance. Normally achieved by the largest number of students. These grades indicate a good grasp of the subject matter or excellent grasp in one area balanced with satisfactory grasp in the other area.
B	5	73-76%	
B-	4	70-72%	
C+	3	65-69%	<b>Satisfactory, or minimally satisfactory.</b> These grades indicate a satisfactory performance and knowledge of the subject matter.
C	2	60-64%	
D	1	50-59%	<b>Marginal</b> Performance. A student receiving this grade demonstrated a superficial grasp of the subject matter.
F	0	0-49%	<b>Unsatisfactory</b> performance. Wrote final examination and completed course requirements; no supplemental.
N	0	0-49%	Did not write examination or complete course requirements by the end of term or session; no supplemental.

### Course Text

*Introductory Digital Image Processing. A Remote Sensing Perspective.*  
John R. Jensen. (4th Edition) Hardcover or Kindly  
I will provide some extra material in Brightspace

---

**Academic Standards**

Plagiarism will be dealt with in accordance with university policy. Please review the calendar for details. Be sure to reference all material you use. If you have any questions, please contact me.

**Students with a Disability**

Students with diverse learning styles and needs are welcome in this course. In particular, if you have a documented disability/health consideration that may require accommodations, please feel free to approach me and/or the Centre for Accessible Learning (CAL) as soon as possible. The CAL staff are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations <https://www.uvic.ca/services/cal/>. The sooner you let us know your needs, the quicker we can assist you in achieving your learning goals in this course.

Please Note: You are under no obligation to disclose your disability.

**Notes**

1. I reserve the right to make changes to the schedule.
2. The best way to reach me is to attend the zoom office hours.
3. If you have ANY concerns related to lectures, labs, and/or exams, please come see me as soon as possible.

**Syllabus Copyright Statement:**

All course content and materials are made available by instructors for educational purposes and for the exclusive use of students registered in their class. The material is protected under copyright law, even if not marked with a ©. Any further use or distribution of materials to others requires the written permission of the instructor, except under fair dealing or another exception in the Copyright Act. Violations may result in disciplinary action under the Resolution of Non-Academic Misconduct Allegations policy (AC1300).

---

**Tentative Course Schedule**

Date	Topic
Jan. 11	Goals and structure of the course. Introduction to Remote Sensing and aerial photos
Jan. 12	Aerial photos
Jan. 18	Aerial photos
Jan. 19	Remote sensing process - radiation properties
Jan. 25	Remote sensing process - image properties
Jan. 26	Remote sensing data collection - sensors
Feb. 1	Remote sensing data collection - sensors
Feb. 2	Radiation - Atmospheric attenuation
Feb. 8	Atmospheric/radiometric correction
Feb. 9	Atmospheric/radiometric correction
Feb. 15	Geometric correction
Feb. 16	Geometric correction
<b>Feb. 22</b>	<b><i>Reading Break – No class</i></b>
<b>Feb. 23</b>	<b><i>Reading Break – No class</i></b>
March 1	Image enhancement
March 2	<b><i>Midterm</i></b>
March 8	Image enhancement
March 9	Image enhancement
March 15	Image enhancement
March 16	Classification
March 22	Classification
March 23	Classification
March 29	Accuracy assessment
March 30	Accuracy assessment
March 5	Invited talk: UAV and satellites for kelp monitoring
March 6	Review

**THE UNIVERSITY OF VICTORIA IS COMMITTED TO PROMOTING, PROVIDING AND PROTECTING A POSITIVE AND SAFE LEARNING AND WORKING ENVIRONMENT FOR ALL OF ITS MEMBERS.**