

## GEOG357 Syllabus Fall 2020

Instructor: Roger Wheate, 8-307, 960-5865; roger.wheate@unbc.ca or wheate@unbc.ca

Lectures: Wednesday/Friday 9.30-10.20 or online

Labs: Thursdays 11.30-14.20 or online

<i><b>Date</b></i>	<i><b>Lecture Topics</b></i>	<i><b>Lab</b></i>
<b>Sept 2020</b>		
9-11	Introduction; Electro-Magnetic Spectrum	<i>Lab 0: Checking the connection</i>
14-18	Image data-display; Sensors/platforms	<i>Lab 1: Image display and DNs</i>
21-25	Unsupervised / Supervised Classification	<i>Lab 2: Unsupervised Classification</i>
28-Oct 2	Band ratios; Indices and Transforms	<i>Lab 3: Supervised Classification</i>
<b>October</b>		
5-9	PCA; Image interpretation	<i>Lab 4: Ratios and indices</i>
13-16	<b>Midterm Exam</b> Feature extraction	<i>Lab 5: Environmental Change</i>
19-23	Env. Change class examples	<i>Lab 6: Feature extraction</i>
26-30	Change detection Pre-processing	<i>Lab 7: Change detection</i>
<b>November</b>		
2-6	DEMs Glaciers	<i>Lab 8: DEMs</i>
9-13	Thermal RS; Microwave / RADAR	<i>Lab 9: Glaciers</i>
16-20	New millenium sensors; LiDAR	<i>Labs 10-12: Project time</i>
23-27	PlanetaryRS/history; Software/review	
30-Dec 4	<b>Second exam</b> Project demos	
Dec 8	Projects due	

### **Evaluation 100%**

- Exams: Oct 14, Dec 2                      30%
- Environmental Change exercise        10%
- Article/website review                  10%
- Lab exercises 5 x 5%                    25%
- Final project, Dec 8                      25%