GEOG357 Syllabus Fall 2024

Instructor: Roger Wheate, 8-307, 960-5865; wheate@unbc.ca Lectures: Tuesday/Thursday 10.30-11.20, 5-174 Labs: Wednesdays 15.00-17.50, 8-125 Date Lecture Topics Lab **Sept 2024** 4-6 Introduction No lab 9-13 Electro-Magnetic Spectrum / Image data-display Lab 1: Image display and DNs 16-20 Unsupervised / supervised classification Lab 2: Unsupervised Classification 23-27 Sensors-platforms / Band ratios Lab 3: Supervised Classification October Sept30-Oct4 Indices / Transforms Lab 4: Ratios and indices Feature extraction / Thermal RS 7-11 Lab 5: Feature extraction 15-18 Env. Change / Mid-Term Exam (15%) Lab 6: Env. Change (prep) 21-25 Glaciers / Change detection Lab 7: Glaciers 28-Nov 1 Projects / Env. Change class demos Lab 8: Change detection November 4 - 8DEMs / Microwave-RADAR Lab 9: DEMs 12-15 Hyperspectral / LiDAR Lab 10: Projects-data 18-22 High resolution sensors / Planetary RS Lab 11: Data processing 25-29 RS Software-course review / Exam2 (10%) *Lab 12: project write-up* Dec 2-3 Project demos – 3-4 minutes each Dec 5-16 exam period (no exam in this course) Evaluation 100% Exams: Oct 17, Nov 28 25% Environmental Change exercise, Oct 31 10% Lab exercises 8 x 5% 40% Final project, Dec 6 20 + 5% (project/outline)