



**COURSE OUTLINE**

**GEOL 101**

**INTRODUCTORY GEOLOGY FIELD SCHOOL**

**3 CREDITS**

PREPARED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
Joel Cubley, Instructor

APPROVED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
Margaret Dumkee, Dean

APPROVED BY ACADEMIC COUNCIL: June 2012



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APPLIED SCIENCE AND MANAGEMENT DIVISION  
Introductory Geology Field School  
3 Credit Course  
Fall, 2017

**INTRODUCTORY GEOLOGY FIELD SCHOOL**

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**INSTRUCTOR:** Dr. Joel Cubley

**OFFICE HOURS:** n/a

**OFFICE LOCATION:** T1090

**CLASSROOM:** M111

**E-MAIL:** jcubley@yukoncollege.yk.ca

**TIME:** Monday - Friday, 8:00-5:00

**TELEPHONE:** (867) 456-8605

**DATES:** August 23<sup>rd</sup> - Sept. 1<sup>st</sup>, 2017

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**COURSE DESCRIPTION**

In this course students will be given a hands-on introduction to geological practices. The primary goals will be to engage students in team-building exercises, give them exposure to basic rock types and geological principles, and provide students with the opportunity to collect their own samples for continued, multidisciplinary analysis during subsequent classroom activities. This field school is mandatory for all students in the Geological Technology program.

**PREREQUISITES**

Admission to the Geological Technology program or permission from the instructor.

**EQUIVALENCY OR TRANSFERABILITY**

Simon Fraser University (SFU) - EASC 206 (2) when taken with YC GEOL113.

University of Victoria (UVic) - EOS 300 (1.5) when taken with YC GEOL113.

Vancouver Island University (VIU) - GEOL 1xx (3)

## LEARNING OUTCOMES

Upon successful completion of the course, students will have demonstrated the ability to

- use basic geological instruments and mapping tools such as Brunton compasses, rock hammers, stereoscopes, etc. in a safe and effective manner.
- record basic geologic relationships by plotting contact and structural data on maps.
- perform the basic map-reading and orienteering tasks that are a fundamental requirement for effective geologic mapping.
- develop a successful working relationship with a mapping team.
- collect and describe samples of geologic materials in support of field investigations.
- use maps (topographic and geologic) to visualize landforms and locate / identify geographic and geologic features.

## COURSE FORMAT

This 1.5-week field school consists of two major components. The first component is a *mandatory* health and safety component - all students must successfully complete Wilderness First Aid (WFA 010). The remainder of the field school will be focused on basic field methods including, but not restricted to: topographic map reading, navigation, basic rock description, and an introduction to geologic compasses and structural measurements. Activities will be conducted in the Whitehorse area, and students will be bussed from the College each morning. Students will be returned to the College by 6 pm daily. Students are required to take college transportation to and from the field area. Use of personal vehicles is not permitted for liability reasons.

On August 29, 2017, all course participants will visit Capstone Mining Corporation's Minto Cu-Au mine near Pelly Crossing, YT. This one-day trip requires participants to leave Whitehorse in the early morning (5:30 am), and the trip will conclude in the evening (8 pm). Additional information will be provided to course participants prior to the site visit.

## **ASSESSMENTS**

### **Attendance and Participation**

Students are required to attend the field camp in its entirety. If extenuating circumstances arise, a course of action will be decided upon by the instructor and the Chair of the School of Science. The instructor **MUST** be informed prior to absence. Field school exercises must be completed during class hours, with the instructor present.

Students must be prepared for inclement weather. In the case of severe weather (e.g. lightning), appropriate safety precautions will be taken, and if the weather continues, students will return to the College.

### **Assignments**

Students are required to hand in completed field school activities at the beginning of the subsequent day's program (e.g. 8am). Generally, assignments are tailored such that they can be completed within the field day; however in some instances additional time will be required in the evenings.

### **Map Project**

At the end of the field school, students will draft a detailed bedrock geology map of a small area on Grey Mountain outside of Whitehorse. This final-copy map will be constructed in groups from field data collected by the students, and will include a write-up describing the lithologies observed.

### **Exam**

A 15-20 minute oral exam will be administered to each student by the instructor and teaching assistant. This exam tests students on their knowledge of concepts presented within the course- no outside material will be incorporated.

In addition to daily activities, the group project, and the oral exam, each student will be critically assessed on their participation during the field camp. A grading rubric for assessment of participation will be provided to each student at the start of the field camp. Students are required to come to field camp each day alert, engaged, and open to actively participating in activities.

## EVALUATION

<i>Tests and Assignments</i>	<i>Weight</i>	<i>Dates</i>
Daily Assignments	40%	Due at the start of each subsequent field exercise.
Final Map and Report	20%	Due September 14, 2015.
Oral Examination	20%	Oral examinations will be scheduled for the final day of the field camp.
Participation	20%	Participation will be assessed holistically for the entire camp period.
Total	100%	

The letter-grading scheme used in this course is the standard Yukon College scheme.

## TEXTBOOKS AND MATERIALS

There is no required textbook for this course. An equipment list will be sent to students well in advance of the start of the course. The college is not responsible for basic field gear (e.g. hiking boots, rain coat, etc.) In addition, basic “personal” geology items (rock hammer, hand lens, etc.) will not be provided, and the equipment list will include suggestions for economical purchase of those items. More specialized geology equipment (compasses, levels, soil shovels, etc.) will be provided by the program, as will safety equipment.

## ACADEMIC AND STUDENT CONDUCT

Information on academic standing and student rights and responsibilities can be found in the current Academic Regulations that are posted on the Student Services/ Admissions & Registration web page ([http://www.yukoncollege.yk.ca//downloads/Acad\\_Regs\\_FINAL\\_March\\_2017.pdf](http://www.yukoncollege.yk.ca//downloads/Acad_Regs_FINAL_March_2017.pdf)).

## PLAGIARISM

Plagiarism is a serious academic offence. Plagiarism occurs when students present the words of someone else as their own. Plagiarism can be the deliberate use of a whole piece of another person’s writing, but more frequently it occurs when students fail to acknowledge and document sources from which they have taken material. Whenever the words, research or ideas of others are directly quoted or paraphrased, they must be documented according to an accepted manuscript style (e.g., APA, CSE, MLA, etc.). Resubmitting a paper which has previously

received credit is also considered plagiarism. Students who plagiarize material for assignments will receive a mark of zero (F) on the assignment and may fail the course. Plagiarism may also result in dismissal from a program of study or the College.

## **YUKON FIRST NATIONS CORE COMPETENCY**

Yukon College recognizes that a greater understanding and awareness of Yukon First Nations history, culture and journey towards self-determination will help to build positive relationships among all Yukon citizens. As a result, to graduate from ANY Yukon College program, you will be required to achieve core competency in knowledge of Yukon First Nations. For details, please see [www.yukoncollege.yk.ca/yfnccr](http://www.yukoncollege.yk.ca/yfnccr).

## **ACADEMIC ACCOMMODATION**

Reasonable accommodations are available for students requiring an academic accommodation to fully participate in this class. These accommodations are available for students with a documented disability, chronic condition or any other grounds specified in Section 8.0 of the Yukon College Academic Regulations (available on the Yukon College website). It is the student's responsibility to seek these accommodations. If a student requires an academic accommodation, he/she should contact the Learning Assistance Centre (LAC) at (867) 668-8785 or [lassist@yukoncollege.yk.ca](mailto:lassist@yukoncollege.yk.ca).