ORIGINAL COURSE IMPLEMENTATION DATE: September 2021
REVISED COURSE IMPLEMENTATION DATE: January 2021
COURSE TO BE REVIEWED (six years after UEC approval)**:** November 2025
Course outline form version: 05/18/2018

OFFICIAL UNDERGRADUATE COURSE OUTLINE FORM

Note: The University reserves the right to amend course outlines as needed without notice.

Course Code and Number: GEOG 493	**Number of Credits:** 4

Course Full Title: Honours Research Project (Physical Geography)
Course Short Title:
(Transcripts only display 30 characters. Departments may recommend a short title if one is needed. If left blank, one will be assigned.)

Faculty: Faculty of Science	**Department (or program if no department):** Geography and the Environment

Calendar Description:

In this course, Honours students will develop advanced library and field data interpretation skills and conduct a written and visual analysis in physical geography.

Note: Students with credit for GEOG 492 cannot take this course for further credit.

Prerequisites (or NONE):	Admission to the Physical Geography Honours program, GEOG 491, and instructor's permission.
Corequisites (if applicable, or NONE):	
Pre/corequisites (if applicable, or NONE):	

Antirequisite Courses *(Cannot be taken for additional credit.)*
Former course code/number:
Cross-listed with:
Dual-listed with:
Equivalent course(s): **GEOG 492**
(If offered in the previous five years, antirequisite course(s) will be included in the calendar description as a note that students with credit for the antirequisite course(s) cannot take this course for further credit.)

Typical Structure of Instructional Hours

Lecture/seminar hours	
Tutorials/workshops	
Supervised laboratory hours	
Experiential (field experience, practicum, internship, etc.)	15
Supervised online activities	
Other contact hours: Meetings with supervisor; student-directed learning; conference presentation	60
Total hours	**75**

Labs to be scheduled independent of lecture hours: ☐ No ☐ Yes

Special Topics *(Double-click on boxes to select.)*
This course is offered with different topics:
☒ No ☐ Yes *(If yes, topic will be recorded when offered.)*

Independent Study
If offered as an Independent Study course, this course may be repeated for further credit: *(If yes, topic will be recorded.)*
☒ No ☐ Yes, repeat(s) ☐ Yes, no limit

Transfer Credit
Transfer credit already exists: *(See **bctransferguide.ca**.)*
☒ No ☐ Yes
Submit outline for (re)articulation:
☒ No ☐ Yes *(If yes, fill in transfer credit form.)*

Grading System
☒ Letter Grades ☐ Credit/No Credit

Maximum enrolment (for information only):

Expected Frequency of Course Offerings:
On demand *(Every semester, Fall only, annually, etc.)*

Department / Program Head or Director: Claire Hay	**Date approved:**	April 2019
Faculty Council approval	**Date approved:**	May 3, 2019
Dean/Associate VP: Lucy Lee	**Date approved:**	May 3, 2019
Campus-Wide Consultation (CWC)	**Date of posting:**	June 21, 2019
Undergraduate Education Committee (UEC) approval	**Date of meeting:**	November 22, 2019

Learning Outcomes:

Upon successful completion of this course, students will be able to:

- Demonstrate, in a thesis project and related oral presentation, an advanced (fourth-year or graduate school equivalent) level of geographic interpretation and analysis of findings of a research project;
- Engage in sound and effective argumentation that supports the central research hypothesis.
- Clearly identify the limitations of their data, particularly issues of data collection, data error and the importance of appropriate analysis techniques.
- Situate their original research within the broader field of related research, and identify areas for further research.
- Confidently and legitimately present their research in written, oral and visual form appropriate to an academic setting.
- Identify and expand upon the issues and theories in a given geographic subject area, and skills in data collection, commensurate with graduate and/or professional work in geography or a related field.

Prior Learning Assessment and Recognition (PLAR)

☐ Yes ☒ No, PLAR cannot be awarded for this course because the Honours project is an integrative, capstone project that takes place at the end of one's program, and which requires instructor supervision and evaluation of a research project over two terms.

Typical Instructional Methods *(Guest lecturers, presentations, online instruction, field trips, etc.; may vary at department's discretion.)*

Independent study involving one-to-one consultation between Honours project supervisor and student; self-directed compilation, analysis, and presentation of research findings.

NOTE: The following sections may vary by instructor. Please see course syllabus available from the instructor.

Typical Text(s) and Resource Materials *(If more space is required, download Supplemental Texts and Resource Materials form.)*

This varies a great deal with the student, and no example will be typical. A recent example:

	Author	Title (article, book, journal, etc.)	Year
1.	Bustard, A., & Ferbey, T.	Open Files. Retrieved from Government of British Columbia: https://www2.gov.bc.ca/gov/content/industry/mineral-exploration-mining/british-columbia-geological-survey/publications/openfiles#OF2016-02	2017, August
2.	Hickin, A., & Plouffe, A.	Sampling and interpreting stream, lake, and glacial sediments for mineral exploration in the Canadian Cordillera, a reviewc. Geological Association of Canada Special Paper Volume 50, and Mineralogical Association of Canada Topics in Mineral Sciences Volume 47, 27-51.	2017
3.	Seigel, C.	Retrieved from Drift Prospecting and Mineral Exploration: http://academic.emporia.edu/aberjame/student/seigel3/drift_prospecting.htm	2006, November
4.	Victor, L. M.	Regional till geochemical surveys in the Candian COrdillera: cample media, methods and anomaly evaluation. Drift Exploration in Glaciated Terrain. Geological Society, Special Publications, 45-68	2001

Required Additional Supplies and Materials *(Software, hardware, tools, specialized clothing, etc.)*

Specific to research project; some travel and/or equipment fees (e.g. batteries) may be incurred by student.

Typical Evaluation Methods and Weighting

Assignments: 65%	Other: 35%
• Compilation and original analysis of research materials (findings), 45% • Overall quality/ formatting/ proofreading of full thesis, 20%	• Formal presentation of research findings before an academic audience, 15% • Visual presentation of research findings, as part of a research poster or alternative, 20%

Details (if necessary):

Each student will work directly with a faculty supervisor to identify the timeline for completing any primary data collection, and the presentation of final research compilation. In most cases, data collection will need to be completed during the previous term or over two terms. When this is the case, then research design and evaluation of data collection will take place in both GEOG 491 and GEOG 493.

The final research project mark will be assessed primarily by the student's Honours supervisor in consultation with the second reader (who will be determined by the supervisor and the student).

Typical Course Content and Topics

Course content varies by research project. The requirements of the individual project will be devised in consultation with the student's Honours supervisor.

A recent example was a topic in economic geology: "Detecting porphyry Cu ± Mo ± Au mineralization using major oxides and pathfinder elements in subglacial till near the Guichon Creek batholith, southcentral BC".