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**COURSE OUTLINE**  
**GIS Applications and Tools**



I want to acknowledge and respect the ləkʷəŋən peoples on whose traditional territory the university stands and the Songhees, Esquimalt and WSÁNEĆ peoples whose historical relationships with the land continue to this day.

**Course Description:** The basics of GIS tool development including applications. The following topics will be covered: Databases, data types and collection; Georeferencing, error, accuracy and precision; Spatial interpolations, modelling; Data representation and visualization; Suitability analysis; Geoprocessing; Internet-based mapping; Directions in GIS.

<b>Class Meetings:</b>	TW 12:30 to 1:20 pm			
<b>Classroom:</b>	COR A125			
<b>Lab Sections:</b>	B01	W	2:30 to 4:20 pm	DTB A253
	B02	R	10:30 am to 12:20 pm	DTB A253
	B03	R	12:30 to 2:30 pm	DTB A253

**COURSE LEARNING OUTCOMES**

- introduces the concepts and applications of geodatabases;
- consolidate understanding of fundamentals of geographic information;
- introduces concepts of Georeferencing;
- introduces Model Builder and Automation;
- consolidates and develops Geoprocessing tools, and custom tool development; i
- introduces concepts and techniques of Online Mapping.

At this time, classes and laboratory periods will be in-person on campus. Exams will be in-person as well. We will be following provincial health and safety guidelines and adaptations to course learning environments may change over the term.

## INSTRUCTOR INFORMATION

**Dr. Shannon Fargey**, Department of Geography, DTB B308, [fargey@uvic.ca](mailto:fargey@uvic.ca) or 250-721-7342.

When emailing me please include 'GEOG 329 - your name' in the subject line. This helps me sort through emails and makes it easier to respond to your message. *It may take up to 48-hrs for a response, especially for messages received on Tuesdays and Wednesdays. Please be patient.*

**Profile:** I am an Assistant Teaching Professor in the Geography Department. My role in the Department is primarily on program delivery, supporting student learning and discovery in Physical Geography, and Geomatics. I am passionate about hydrometeorological topics and field-based learning. To learn more about me, and stay updated with exciting new studies in our field, please visit my website [shannonfargey.com](http://shannonfargey.com) and follow me on Twitter @fargetmenot

**Office Hours:** Online (via zoom) Wed (2:00 - 3:00 pm) and Friday (10:00 am to 12:00 pm)

I welcome you to come and discuss your ideas and questions anytime during this course, however because of the pandemic my 'normal' open-door policy is now a virtual one. Please use the office hour times above to drop in online or send me an email to make an appointment. If an in-person meeting is necessary (at my discretion) you will be required to wear a mask, sanitize in advance of entering my office and stay at a social distance.

**Zoom link on Brightspace.**

## EVALUATION

Midterm Exam (March 1)	20%
Final Exam	40%
Assignments	40%

Exams will be a mix of multiple choice and written questions. All lecture material and additional resources provided via Brightspace will be included on the exams. The final exam will be comprehensive but will be more heavily weighted on the material covered after the midterm. If you miss the midterm exam for an approved reason, the weight of the midterm will be added to the final exam. No make-up exam is offered.

Additional information about the evaluation components can be found on Brightspace.

## REQUIRED TEXTS

There is no required textbook for this class. I will post to BrightSpace links to readings or other media these are required and will be included on the midterm and final exam.

## GEOGRAPHY DEPARTMENT INFORMATION

Geography Department website: <http://geog.uvic.ca>  
Undergraduate Advising: [geogadvising@uvic.ca](mailto:geogadvising@uvic.ca)  
Department Chair: Dr. David Atkinson [geogchair@uvic.ca](mailto:geogchair@uvic.ca)

## BRIGHTSPACE

Brightspace learning management systems (LMS) will serve as the main avenue of communication (<https://www.uvic.ca/systems/services/learningteaching/brightspace/index.php>). Please monitor the page on a regular basis for course announcements. If you are having difficulty logging in or password problems, contact the Computer Help Desk Email: [helpdesk@uvic.ca](mailto:helpdesk@uvic.ca), Tel: 250-721-7687

## GRADING SYSTEM

As per the Academic Calendar:

Grade	Grade point value	Grade scale	Description
A+	9	90-100%	Exceptional, outstanding and excellent 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%	Very good, good and solid 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%	Satisfactory, or minimally satisfactory. These grades indicate a satisfactory performance and knowledge of the subject matter.
C	2	60-64%	
D	1	50-59%	Marginal Performance. A student receiving this grade demonstrated a superficial grasp of the subject matter.
F	0	0-49%	Unsatisfactory 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.

## IMPORTANT COURSE POLICIES

Attendance is expected for lectures and lab assignment time. Recordings of lecture material or laboratory introductions will not be provided unless the University reinstates online learning.

A high level of student cooperation and participation, involving asking and answering questions is expected. Students are also expected to be punctual for course meetings.

Students must complete all evaluation components to obtain credit. Failure to complete any evaluation component without permission from the instructor, will result in an 'N' grade, which equals a Grade Point Value of 0.

As an Instructor, I can refuse a student admission to a lecture, laboratory, learning activity or exam because of lateness, misconduct, inattention or failure to meet the responsibilities of the course. Students who neglect their academic work may be assigned a final grade of 'N' (which equals a Grade Point Value of 0) or

debarred from final examinations. Please refer to the UVic academic calendar in the section on student academic conduct for further information.

Lab Assignments are due before the start of your scheduled lab time. Late assignments and/or project work will be penalized 20% per day (including weekends). Exceptions will only be granted for medical or compassionate reasons. Please contact the instructor as soon as possible. Only the course instructor can grant exceptions.

Conflicts with work, holidays or travel plans are not considered an acceptable reason to apply for a deferred assignment or project extension.

Unless otherwise stated students are expected to complete assignments independently.

## **PLAGIARISM**

It is every student's responsibility to be aware of the university's policies on academic integrity, including policies on cheating, plagiarism, unauthorized use of an editor, multiple submission, and aiding others to cheat. Policy on Academic Integrity: [web.uvic.ca/calendar/undergrad/info/regulations/academic-integrity.html](http://web.uvic.ca/calendar/undergrad/info/regulations/academic-integrity.html)

Academic dishonesty (plagiarism, cheating) is a very serious matter in any academic institution and is dealt with severely at the University of Victoria. Instructors and academic units have the responsibility to ensure that standards of academic honesty are met. By doing so, the institution recognizes students for their hard work and assures them that other students do not have an unfair advantage through cheating on essays, exams, and projects. Plagiarism sometimes occurs due to a misunderstanding regarding the rules of academic integrity, but it is the responsibility of the student to know them. If you are unsure about the standards for citations, for referencing your sources, or unauthorized use of an editor, please familiarize yourself with the University policy on academic integrity found in the Undergraduate Calendar at the following website - <https://www.uvic.ca/students/academics/academic-integrity/index.php#ipn-policies-consequences>.

Infractions will be dealt with in accordance with University policy. Commonly, the penalty for any form of cheating/plagiarism is a grade of F on the tests or laboratory assignments, or a final grade of F in the course. However, depending on the severity of the case other penalties may include a record on the student's transcript or expulsion.

Please contact me if you have any questions.

## **ACCESSIBILITY**

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 <http://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.

## **POSITIVITY AND SAFETY**

The University of Victoria is committed to promoting, providing and protecting a positive and safe learning and working environment for all its members. To ensure that all class members feel welcomed and equally able to contribute to class discussions, we will all endeavor to be respectful in our language, our examples, and the manner in which we conduct our discussions and group work. If you have any concerns about the climate of the class, please contact me.

## **COURSE EXPERIENCE SURVEY (CES)**

We value your feedback on this course. Towards the end of the course, as in all other courses at UVic, you will have the opportunity to complete an anonymous survey regarding your learning experience (CES). The survey is vital to providing feedback to me regarding the course and my teaching, as well as to help the department improve the overall program for students in the future. The survey is accessed via MyPage and can be done on your laptop, tablet, or mobile device. I will remind you and provide you with more detailed information nearer the time but please be thinking about this important activity during the course.

## **SEXUALIZED VIOLENCE PREVENTION AND RESPONSE AT UVIC**

UVic takes sexualized violence seriously, and has raised the bar for what is considered acceptable behaviour. We encourage students to learn more about how the university defines sexualized violence and its overall approach by visiting [uvic.ca/svp](http://uvic.ca/svp). If you or someone you know has been impacted by sexualized violence and needs information, advice, and/or support please contact the sexualized violence resource office in Equity and Human Rights (EQHR). Whether or not you have been directly impacted, if you want to take part in the important prevention work taking place on campus, you can also reach out:

Where: Sexualized violence resource office in EQHR; Sedgewick C119

Phone: 250.721.8021

Email: [svpcoordinator@uvic.ca](mailto:svpcoordinator@uvic.ca)

Web: [uvic.ca/svp](http://uvic.ca/svp)

## **DISCLAIMER**

The presented schedules, policies, procedures, and assignments in this course are subject to change in the event of extenuating circumstances.