

**GEOG 329 – GIS Applications and Tools
Term – Spring 2021****Instructor:** Jessica Dhami**Email:** jdhami@uvic.ca

The best way to contact me is by email, I will reply as soon as possible but please allow up to 24hrs for a response.

Office hours: Mondays 13:00 – 14:00 (or by appointment).

Office hours will be accessible on the same zoom link as the lecture.

Prerequisites:

GEOG 222 – Introduction to Maps and GIS

GEOG 228 – Introduction to Remote Sensing

GEOG 226 – Introduction to Quantitative Methods in Geography

Lecture information: A01 Tuesdays and Wednesdays 12:30 to 13:20, online meetings.**Zoom link:** See BrightSpace.

Lab information:	B01	Wednesday	14:30 to 16:20	online
	B02	Thursday	08:30 to 10:20	online
	B03	Thursday	11:30 to 13:20	online

Required text and additional resources: 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.

Learning outcomes:

1. Use GIS to solve advanced spatial problems;
2. Gain basic understanding of GIS modelling tools and applications;
3. Develop familiarity with online mapping using ArcGIS Online;
4. Build on existing skills and abilities in ArcMap. Including the use of model builder, geoprocessing tools, integration of different data types, and data storage methods;
5. Gain experience writing formal reports, searching the academic literature for resources, and presenting original work.

Course Evaluation

Midterm	February 23 rd in class	20%
Final Exam	TBD in exam period	40%
Laboratory 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.

Course Topics

- Databases, data types and collection;
- Georeferencing, error, accuracy and precision;
- Spatial interpolations, modelling;
- Data representation and visualization;
- Suitability analysis;
- Geoprocessing;
- Internet-based mapping;
- Future of GIS.

Lab Schedule

Week	Dates	Lab	Due Dates
1	Jan 11 th to 15 th	No Lab	
2	Jan 18 th to 22 nd	Lab 0 (1%)	Lab 0
3	Jan 25 th to 29 th	Lab 1 Geodatabases (8%)	
4	Feb 1 st to 5 th	Lab 1	
5	Feb 8 th to 12 th	Lab 2 Georeferencing (8%)	Lab 1
6	Feb 15th to 19th	Reading Break	
7	Feb 22 nd to 26 th	Lab 3 Automation (6%)	Lab 2
8	Mar 1 st to 5 th	Lab 4 Suitability Analysis (9%)	Lab 3
9	Mar 8 th to 12 th	Lab 4	
10	Mar 15 th to 19 th	Lab 5 Story Maps (8%)	Lab 4
11	Mar 22 nd to 26 th	Lab 5	
12	Mar 29 th to Apr 2 nd	Presentations	Lab 5
13	Apr 5 th to 9 th	Presentations	Lab 5

Grading System

As per UVic's Academic Calendar:

Grade	Grade Point Value	Percentage*	Description
A+	9	90 - 100	An A+, A, or A- is earned by work which is technically superior, shows mastery of the subject matter, and in the case of an A+ offers original insight and/or goes beyond course expectations. Normally achieved by a minority of students.
A	8	85 - 89	
A-	7	80 - 84	
B+	6	77 - 79	A B+, B, or B- is earned by work that indicates a good comprehension of the course material, a good command of the skills needed to work with the course material, and the student's full engagement with the course requirements and activities. A B+ represents a more complex understanding and/or application of the course material.
B	5	73 - 76	
B-	4	70 - 72	
C+	3	65 - 69	A C+ or C is earned by work that indicates an adequate comprehension of the course material and the skills needed to work with the course material and that indicates the student has met the basic requirements for completing assigned work and/or participating in class activities.
C	2	60 - 64	
D	1	50 - 59	A D is earned by work that indicates minimal command of the course materials and/or minimal participation in class activities that is worthy of course credit toward the degree.
COM	Excluded Grade	N/A	Complete (pass). Used only for 0-unit courses and those credit courses designated by the Senate. Such courses are identified in the course listings.
CTN	Excluded Grade	N/A	Continuing . Denotes the first half of a full-year course.

<https://www.uvic.ca/calendar/undergrad/index.php#/policy/S1AAgoGuV?bc=true&bcCurrent=14%20-%20Grading&bcGroup=Undergraduate%20Academic%20Regulations&bctemType=policies>

Important Dates

January 24th Last day for 100% reduction of second term fees for standard courses

January 27th Last day for adding courses that begin in the second term

February 14th Last day for 50% reduction of tuition fees for standard courses

February 28th Last day for withdrawing from full year and second term courses without penalty of failure

See calendar for all important dates: <https://www.uvic.ca/calendar/dates/index.php>

Course Policies

Students are expected to attend all lectures and review all additional course material provided. Please have your camera on zoom when possible, and interrupt to ask questions as you would in a normal classroom.

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

Labs must be submitted at the beginning of the lab period on the week they are due. Late assignments will be penalized 20% per day including weekends and holidays. Students must attend all exams; no make-up exams will be provided in this course. Exceptions will only be made for medical or compassionate reasons. A medical note may be required for proof. Only the course instructor can grant extensions. Please inform the course instructor as soon as possible if a situation arises.

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 University of Victoria academic calendar in the section on student academic conduct for further information.

Labs are marked by the lab instructor. If you have questions about the marking please see your lab instructor first. If you require further clarification see the course instructor.

Unless otherwise stated students are expected to complete assignments independently.

Academic Integrity

Academic integrity violations will be dealt with according to the Academic Calendar. Most types of violations will result in a failing grade.

Please familiarize yourself with UVic's policies on Academic integrity:

https://www.uvic.ca/calendar/undergrad/index.php#/policy/Sk_0xsM_V?bc=true&bcCurrent=08%20-%20Policy%20on%20Academic%20Integrity&bcGroup=Undergraduate%20Academic%20Regulations&bcItemType=policies

Accessibility

Students with diverse learning styles and needs are welcome in this course. In particular, if you have a documented disability or health consideration that may require accommodations, please feel free to approach me and/or the Centre for Accessible Learning (CAL as soon as possible <https://www.uvic.ca/services/cal/>). The CAL staff is available by appointment to assess specific needs, provide referrals, and arrange appropriate accommodations. The sooner you let us know

your needs, the quicker we can assist you in achieving your learning goals in this course. You are under no obligation to disclose.

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 endeavour 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.

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. 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

Web: uvic.ca/svp

Disclaimer: Topics, dates, assignments, and procedures are subject to change in the event of extenuating circumstances.

Note

A note to remind you to take care of yourself. Do your best to maintain a healthy lifestyle this semester by eating well, exercising, getting enough sleep and taking some time to relax. This will help you achieve your goals and cope with stress. All of us benefit from support during times of struggle. You are not alone.

Counselling Services -Counselling Services can help you make the most of your university experience. They offer free professional, confidential, inclusive support to currently registered UVic students. uvic.ca/services/counselling/

Health Services -University Health Services (UHS) provides a full service primary health clinic for students, and coordinates healthy student and campus initiatives.uvic.ca/services/health/

Centre for Accessible Learning -The CAL staff are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations 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.

Elders' Voices -The Office of Indigenous Academic and Community Engagement (IACE) has the privilege of assembling a group of Elders from local communities to guide students, staff, faculty and administration in Indigenous ways of knowing and being.
uvic.ca/services/indigenous/students/programming/elders/index.php