

## **GEOGRAPHY 222 A01**

UNIVERSITY OF VICTORIA Fall Term 2020 Dr. Ian J O'Connell

# COURSE OUTLINE Introduction to Maps and GIS

Contact: ianoc@uvic.ca

**Office Hours:** See Brightspace, or by appointment

Class Meetings: Tuesdays and Wednesdays 9:30 am to 10:20 am (PDT)

Location: Brightspace's Zoom module and Synchronous

**Labs**: You must be registered in a Lab Section **that you attend.** 

## **COURSE OBJECTIVES**

introduce fundamentals of geographic information;

introduce spatial data;

- introduce Geographic Information Systems;
- gain familiarity with GIS software;
- introduce digital mapping;
- introduce GIS applications.

## **LEARNING OUTCOMES**

- 1. ability to complete continuous and discrete geo-referencing;
- 2. ability to read and calculate scales;
- 3. ability to understand, evaluate and select suitable map projections;
- 4. ability to classify geographic information;
- 5. ability to differentiate between different types of maps;
- 6. describe how GIS can be used to solve problems;
- 7. ability to explore GIS data, metadata and maps;
- 8. basic digital GIS map skills.

#### **COURSE FORMAT**

Given the current situation and need for physical distancing, the course will be delivered remotely online and will involve a mixture of lab activities and online **live** video lecture sessions.

Because of its online delivery there might be some additional challenges for you as a student.

Please read the following carefully and keep in mind for the course:

• Useful information on online learning can be found at the <u>UVic Learn Anywhere</u> portal.

- Brightspace (which has replaced CourseSpaces) is the main course hub where you will access materials (e.g. the course outline, readings, links), complete quizzes and exams, submit assignments, check your grades, and engage in discussions. This will serve as the main avenue of communication (<a href="https://bright.uvic.ca/">https://bright.uvic.ca/</a>). 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, Tel: 250-721-7687
- Much of this course will be delivered "**live**" on Tuesday and Wednesdays from 9:30am-10:20am (Pacific Daylight Time) through the **Zoom** (video-conferencing) platform. All UVic students are automatically provisioned with access to Zoom. To access the live zoom components you will first log into **Brightspace**. Select **Geog222**.
- Click **Course Tools** > Scroll to **Zoom** > Select the **Date** and **time** of the class you are attending. Click on **JOIN**. You may also need to sign-in with Zoom, if prompted sign in with your netlink-id via the **SSO** button. If you have a non-UVic Zoom account it will not let you into the class or labs meeting. For labs follow the same instructions but click on the name of your lab instructor.
- Attending the live lectures at the designated times is expected. Real-time interaction with
  the instructor and class-mates as well as the structure provided by having set times greatly
  enhances the learning experience. However, recognizing students face unusual challenges in
  the context of the COVID-19 disruption, detailed course slides and lab instructions will be
  posted. Lectures and Labs are NOT recorded.
- **Technology requirements**: You will need reliable access to the internet and a computer (preferably with webcam/microphone) or a smartphone to connect with the class for the online lessons (through Zoom). You should be comfortable using a word processor such as MS Word (Office 365) and will be required to submit some assignments in .doc or .pdf formats.
- **Technology requirements for Labs:** You will need reliable access to the internet and a computer. You will not be able to complete the labs with a smartphone or tablet. The Labs employ Open source software (QGIS (<a href="https://qgis.org/en/site/">https://qgis.org/en/site/</a>) You are encouraged and expected to download and install a copy to your computer. The software is free to access and download. We appreciate that this may not be possible for everyone and if so please let us know and we will endeavour to try and facilitate your remote access to the software. We also employ an Online GIS ESRI ArcGIS Online.

## • EDUCATIONAL TECHNOLOGY : ESRI : ArcGIS Online

- I use a variety of educational technology in this course including internet-based technologies or web-based applications, cloud services and social media. The use of technology is part of your engagement at the University. Some of these learning tools may collect, use and/or disclose your personal information and store or access that information outside of Canada. UVic cannot require students to disclose personal information to technologies or organizations which may store information on servers located outside of Canada because disclosure of personal information to vendors, systems or services storing or accessing that personal information outside of Canada is restricted by section 30.1 of BC's Freedom of Information and Protection of Privacy Act (FIPPA). Personal information is information about an identifiable individual; for example, your name or your email address.
- The following educational technologies, which stores or accesses your personal information outside Canada, are required for this course: **ESRI : ArcGIS Online**<a href="https://www.arcgis.com/home/index.html">https://www.arcgis.com/home/index.html</a>]. I will make you aware if this list changes. I use these technologies to enhance your educational experience at UVic. The personal information is required by the service. The privacy policy and the terms of use are available at: <a href="https://www.esri.com/en-us/privacy/overview">https://www.esri.com/en-us/privacy/overview</a>. I encourage you to read these</a>

documents.

- For the use of ArcGIS Online, we generate a username that will be an alias but in order to generate and manage your password, your email address is required.
- If you are not comfortable with your personal information being stored outside of Canada, please speak to me within the first week of class about using an alternative (such as using an alias or nickname).
- Otherwise, by continuing in this course, you agree to the use of the educational technology in the course and the storage of personal information outside of Canada.
- The online format can seem strange and awkward at first, but we will do everything possible to make this a **comfortable and effective learning environment**. Keep in mind that we are all new to this format and we all need to be forgiving, open-minded and adaptable. We're in it together.
- Ensure you have a **distraction-free** space at home (or elsewhere) for the online classes.
- To help **build community**, you are encouraged, **but not required**, to turn your video on during sessions. However, I understand there are circumstances in which you may be unwilling or unable to do so which is perfectly acceptable. Remember when joining with video, your classmates will be able to see your background.
- The "live" portion of the course will generally involve lectures, labs, and time for questions and answers. Please listen carefully to directions given at the beginning of class around asking questions and effective dialogue through this format. When you are not actively contributing, please ensure you "mute" yourself to reduce ambient noise.
- Please be respectful, constructive, and professional in all your online interactions. No falling into troll-mode.

# **REQUIRED TEXT**

There is no required textbook for this course, however weekly readings and online learning resources will be provided on **Brightspace** throughout the course.

## **EVALUATION**

Midterm Exam #1 (October 14 <sup>th</sup> in class)	10%
Midterm Exam #2 (November 17 <sup>th</sup> in class)	15%
Laboratory Assignments x 6	42%
Final Exam (During Exam period)	33%

**Advice:** Students have in the past found that some of the lab assignments can be time-consuming and challenging. We are here to help with this – Please make sure you schedule your time effectively. The Labs are two hours. Please plan to be there for the entire lab time. The labs materials are designed to be both **supplemental** and **complementary** to the lectures. Slides are **not** designed to replace attendance in class or lab.

No audio or video recordings are permitted unless approved in writing (in advance) by the course instructor.

**Exam Format:** The questions for the midterm exams and final exam will be based on lectures, labs, posted learning resources and class discussion. The final exam is comprehensive. Formats includes a

combination of short-answer, calculations, and multiple-choice questions. **Electronic devices for use** during exams are limited to non-graphing scientific calculators, unless otherwise expressly permitted by the course instructor.

- I will be reviewing the expectations related to academic integrity at the beginning of the course
  and will be requiring students to commit to an academic integrity pledge within the context of
  assessment processes including examinations.
- Lockdown browser: UVic is in the process of purchasing a site-wide license for a lockdown browser that faculty and instructors can use when proctoring an online exam through the Brightspace LMS starting in the fall term. We anticipate that it will be compatible with Zoom, so that instructors who wish to do so can use the combination of Zoom with the lockdown browser to invigilate exams. I will be providing more details on this when the term begins.

## **GRADING SYSTEM**

As per the Academic Calendar:

Grade	Grade point value	Grade scale	Description
A+ A A-	9 8 7	90-100% 85-89% 80-84%	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.
B+ B B-	6 5 4	77-79% 73-76% 70-72%	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. Normally achieved by the largest number of students.
C+ C	3 2	65-69% 60-64%	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.
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.
F	0	0-49%	F is earned by work, which after the completion of course requirements, is inadequate and unworthy of course credit towards the degree.
N	0	0-49%	Did not write examination or complete course requirements by the end of term or session; no supplemental.

## **GEOGRAPHY DEPARTMENT INFORMATION**

Geography Department website: <a href="https://www.uvic.ca/socialsciences/geography/">uvic.ca/socialsciences/geography/</a>

Undergraduate Advising: <a href="mailto:geogadvising@uvic.ca">geogadvising@uvic.ca</a>

Department Chair: Dr David Atkinson <a href="mailto:geogchair@uvic.ca">geogchair@uvic.ca</a>

#### **IMPORTANT COURSE POLICIES**

A high level of student cooperation and participation, involving asking and answering questions is expected. Students are expected to attend all lectures, take notes and be punctual for class.

Cell phones and portable music players must be turned off or silenced during lectures and labs.

Topic handouts based on lecture presentations will be provided before the beginning of class meetings on Brightspace. These handouts will be removed **seven days** after the posting date. Students are responsible for downloading/saving and completing notes packages. *If you miss any material, make arrangements to get handouts from a fellow student, not from the instructor*.

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

Students will not be permitted to write make-up tests except for medical or compassionate reasons. Please inform the instructor of your situation promptly. Any make-up test or examination may not follow the same format as the in-class one.

Lab assignments are due at the beginning of your lab section; thereafter late penalties will be applied.

Late assignments will be penalized **25% for each 24 hour time period** (including weekends and holidays). After that they will **no longer** be accepted for grade and will receive **0%**. Exceptions will only be granted for medical or compassionate reasons. *Only the course instructor can grant exceptions*.

Details regarding your labs and their marks are managed by the course Lab Instructors. Please discuss any issues or questions on labs with your Lab Instructor first. Any discrepancy with lab grades must be reported to your Lab Instructor, then the Course Instructor within **seven days** of receiving the marked assignment.

Please attend only the laboratory section for which you are registered. If you must miss a lab for exceptional circumstances, please make arrangements with your TA in advance to attend another section. This however does not change the due date of your lab assignment.

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

Unless otherwise stated students are expected to complete assignments independently.

#### **PLAGIARISM**

Academic dishonesty (plagiarism, cheating) is a very serious matter in any academic institution and is dealt with severely at the University of Victoria. *The responsibility of the institution:* 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. *The responsibility of the student:* 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 or for referencing your sources, ask your instructor.

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 familiarize yourself with the University policy on academic integrity found in the Undergraduate Calendar at the following website. Please contact me if you have any questions. web.uvic.ca/calendar2019-09/undergrad/info/regulations/academic-integrity.html

#### **ACCESSIBILITY**

Students with diverse learning styles and needs are welcome in this course. In particular, if you have a 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 (<a href="https://www.uvic.ca/services/cal/">https://www.uvic.ca/services/cal/</a>). The sooner you let us know your needs the quicker we can assist you in achieving your learning goals in this course. **Please note:** 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 <a href="uvic.ca/svp">uvic.ca/svp</a>. 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: <u>uvic.ca/svp</u>

# **COURSE EXPERIENCE SURVEY (CES)**

We value your feedback on this course. Towards the end of term, 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.

#### **COPYRIGHT NOTICE**

All course content and materials are made available by instructors for educational purposes and for the exclusive use of students registered in their class. The material is protected under copyright law, even if not marked with a ©. Any further use or distribution of materials to others requires the written permission of the instructor, except under fair dealing or another exception in the Copyright Act. Violations may result in disciplinary action under the Resolution of Non-Academic Misconduct Allegations policy (AC1300).

#### **Course Information**

## **Lecture Topics Tentative Schedule**

	Dates	Lab	<b>Due Dates</b>
1	Sept. 7 <sup>th</sup> – Sept. 11 <sup>th</sup>	No Lab	
2	Sept. 14 <sup>th</sup> – Sept. 18 <sup>th</sup>	Lab 0 (Mandatory)	
3	Sept. $21^{st}$ – Sept. $25^{th}$	Lab 1 Spatial Data 7%	
4	Sept. $28^{th}$ – Oct. $2^{nd}$	Lab 2 Coordinate Systems 7%	Lab 1
5	Oct. 5 <sup>th</sup> – Oct. 9 <sup>th</sup>	Lab 3 Queries 7%	Lab 2
6	Oct. 12 <sup>th</sup> – Oct. 16 <sup>th</sup>		
7	Oct. 19 <sup>th</sup> – Oct. 23 <sup>rd</sup>	Lab 4 Overlay Analysis 7%	Lab 3
8	Oct. 26 <sup>th</sup> – Oct. 30 <sup>th</sup>		
9	Nov. $2^{nd}$ – Nov. $6^{th}$	Lab 5 Raster Analysis 7%	Lab 4
10			
11	Nov. 16 <sup>th</sup> – Nov. 20 <sup>th</sup>	Lab 6 Metadata and Web Maps 7%	Lab 5
12	Nov. 24 <sup>th</sup> – Nov. 27 <sup>th</sup>		
13	Nov. $30^{th}$ – Dec. $4^{th}$		Lab 6

You will have space on our servers to complete assignments – only materials relating to GEOG 222 can be stored – no personal or private material allowed

## **EDUCATIONAL TECHNOLOGY**

I use a variety of educational technology in this course including internet-based technologies or web-based applications, cloud services and social media. The use of technology is part of your engagement at the University. Some of these learning tools may collect, use and/or disclose your personal information and store or access that information outside of Canada.

UVic cannot require students to disclose personal information to technologies or organizations which may store information on servers located outside of Canada because disclosure of personal information to vendors, systems or services storing or accessing that personal information outside of Canada is restricted by section 30.1 of BC's Freedom of Information and Protection of Privacy Act (FIPPA). Personal information is information about an identifiable individual; for example, your name or your email address.

The following educational technologies, which stores or accesses your personal information outside Canada, are required for this course: **ESRI**: **ArcGIS Online** <a href="https://www.arcgis.com/home/index.html">https://www.arcgis.com/home/index.html</a>]. I will make you aware if this list changes. I use these technologies to enhance your educational

experience at UVic. The personal information is required by the service. The privacy policy and the terms of use are available at: <a href="https://www.esri.com/en-us/privacy/overview">https://www.esri.com/en-us/privacy/overview</a>. I encourage you to read these documents.

For the use of ArcGIS Online, we generate a username that will be an alias – but in order to generate and manage your password, your email address is required.

If you are not comfortable with your personal information being stored outside of Canada, please speak to me within the first week of class about using an alternative (such as using an alias or nickname).

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