

COURSE SYLLABUS



COURSE TITLE: GEOG-217: Maps and GIS

CLASS SECTION: 001

TERM: Fall 2023

COURSE CREDITS: 3

DELIVERY METHOD(S): Face-to-Face

Camosun College campuses are located on the traditional territories of the Lək̓ʷəŋən and W̱SÁNEĆ peoples. We acknowledge their welcome and graciousness to the students who seek knowledge here.

Learn more about Camosun's [Territorial Acknowledgement](#).

INSTRUCTOR DETAILS

NAME: Emrys Prussin

EMAIL: prussine@camosun.ca

OFFICE: Fisher 250C

HOURS: Tuesdays and Wednesdays 12:30 - 1:30

As your course instructor, I endeavour to provide an inclusive learning environment. However, if you experience barriers to learning in this course, do not hesitate to discuss them with me. Camosun College is committed to identifying and removing institutional and social barriers that prevent access and impede success.

CALENDAR DESCRIPTION

The course provides a conceptual and practical introduction to maps and Geographic Information Systems (GIS). Students are introduced to techniques and fundamentals of spatial data and analysis. Topics include: scale, map interpretation, and digital mapping.

PREREQUISITE(S):

One of:

- C in ENGL 151
- C in ENGL 161
- C in ENGL 163
- C in ENGL 164

CO-REQUISITE(S):

Not Applicable

EXCLUSION(S):

Not Applicable

COURSE LEARNING OUTCOMES / OBJECTIVES

Upon completion of this course a student will be able to:

1. Describe basic concepts in mapping, including geo-referencing, scale, projection and map interpretation.
2. Differentiate between different types of maps.
3. Analyze GIS data and metadata to interpret digital maps.
4. Use GIS software to solve geographic problems and produce digital maps.

REQUIRED MATERIALS & RECOMMENDED PREPARATION / INFORMATION

All lecture and lab material will be provided and posted on D2L. Labs will be held once per week and posted to D2L, please come prepared to each lab as they require the full lab period to complete. This course will use D2L to post all course material, as the place to hand-in labs and assignments, and where you can go to check due-dates and grades.

Textbook (optional):

GIS Fundamentals: A First Textbook on Geographic Information Systems, Seventh Ed., Bolstad, Paul V., Manson, Steven, Eider Press, 2022.

COURSE SCHEDULE, TOPICS, AND ASSOCIATED PREPARATION / ACTIVITY / EVALUATION

The following schedule and course components are subject to change with reasonable advance notice, as deemed appropriate by the instructor.

| WEEK | WEEK # | LECTURE | LAB | ASSIGNMENT |
|--------|--------|--|--|--------------|
| 04-Sep | 1 | Labour Day – NO CLASS | Lab 1: Introduction to ArcGIS | None |
| 11-Sep | 2 | Intro to GIS and Data Models | Lab 2: Projections | Assignment 1 |
| 18-Sep | 3 | Datums, Projections, and Co-ordinate Systems | Lab 3: Digitizing | Assignment 2 |
| 25-Sep | 4 | Maps, Data Entry, Cartography, and Transformations | Lab 4: Topology | Assignment 3 |
| 02-Oct | 5 | QUIZ 1 | Lab 5: Digital Data and Basic Table Operations | None |
| 09-Oct | 6 | Thanksgiving – NO CLASS | Lab 6: Table Operations | None |
| 16-Oct | 7 | GNSS, Remote Sensing, and Digital Data | Lab 7: Table Import and Joins | Assignment 4 |
| 23-Oct | 8 | Attribute Tables and Basic Spatial Analysis | Lab 8: Buffering and Overlay | Assignment 5 |
| 30-Oct | 9 | QUIZ 2 | Lab 9: Raster Analysis | None |
| 06-Nov | 10 | Raster and Terrain Analysis | Lab 10: Terrain Analysis | Assignment 6 |
| 13-Nov | 11 | Spatial Estimation | Lab 11: Interpolation | Assignment 7 |

| | | | | |
|--------|----|--|---------------------------------|--------------|
| 20-Nov | 12 | Models and Modeling | Lab 12: Cartographic Modeling 1 | Assignment 8 |
| 27-Nov | 13 | QUIZ 3 | Lab 13: Cartographic Modeling 2 | None |
| 04-Dec | 14 | Data Standards/Quality and New Developments in GIS | | None |

Students registered with the Centre for Accessible Learning (CAL) who complete quizzes, tests, and exams with academic accommodations have booking procedures and deadlines with CAL where advanced notice is required. Deadlines can be reviewed on the [CAL exams page](http://camosun.ca/services/accessible-learning/exams.html). <http://camosun.ca/services/accessible-learning/exams.html>

EVALUATION OF LEARNING

| DESCRIPTION | WEIGHTING |
|--------------|-------------|
| Labs | 65% |
| Assignments | 20% |
| Quizzes | 15% |
| TOTAL | 100% |

If you have a concern about a grade you have received for an evaluation, please come and see me as soon as possible. Refer to the [Grade Review and Appeals](http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf) policy for more information. <http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf>

COURSE GUIDELINES & EXPECTATIONS

Lectures

Lecture slides will be posted to D2L along with any suggested readings.

Labs

There will be thirteen labs held once per week and these will typically require the full lab period. Labs will be posted to D2L and will involve using ArcGIS Pro to apply course concepts with a variety of data. Labs are due one week after they are started, unless otherwise stated (Lab 14 is due two weeks after started), and each lab is worth 5% of the final grade.

Quizzes

There will be three quizzes, which will not be cumulative. These will be based on lecture and lab material, held during class, and each quiz is worth 5% of the final grade.

Assignments

There will be eight short assignments that are designed as a review of material covered in lecture. These will be done in class after each lecture, there will be time left to work on these in class but may need to be done as homework if time does not permit to finish during class time. Each assignment is worth 2.5% of the final grade.

SCHOOL OR DEPARTMENTAL INFORMATION

STUDENT RESPONSIBILITY

Enrolment at Camosun assumes that the student will become a responsible member of the College community. As such, each student will display a positive work ethic, assist in the preservation of College property, and assume responsibility for their education by researching academic requirements and policies; demonstrating courtesy and respect toward others; and respecting expectations concerning attendance, assignments, deadlines, and appointments.

SUPPORTS AND SERVICES FOR STUDENTS

Camosun College offers a number of services to help you succeed in and out of the classroom. For a detailed overview of the supports and services visit <http://camosun.ca/students/>.

| | |
|-------------------------------------|---|
| Academic Advising | http://camosun.ca/advising |
| Accessible Learning | http://camosun.ca/accessible-learning |
| Counselling | http://camosun.ca/counselling |
| Career Services | http://camosun.ca/coop |
| Financial Aid and Awards | http://camosun.ca/financialaid |
| Help Centres (Math/English/Science) | http://camosun.ca/help-centres |
| Indigenous Student Support | http://camosun.ca/indigenous |
| International Student Support | http://camosun.ca/international/ |
| Learning Skills | http://camosun.ca/learningskills |
| Library | http://camosun.ca/services/library/ |
| Office of Student Support | http://camosun.ca/oss |
| Ombudsperson | http://camosun.ca/ombuds |
| Registration | http://camosun.ca/registration |
| Technology Support | http://camosun.ca/its |
| Writing Centre | http://camosun.ca/writing-centre |

If you have a mental health concern, please contact Counselling to arrange an appointment as soon as possible. Counselling sessions are available at both campuses during business hours. If you need urgent support after-hours, please contact the Vancouver Island Crisis Line at 1-888-494-3888 or call 911.

COLLEGE-WIDE POLICIES, PROCEDURES, REQUIREMENTS, AND STANDARDS

Academic Accommodations for Students with Disabilities

The College is committed to providing appropriate and reasonable academic accommodations to students with disabilities (i.e. physical, depression, learning, etc). If you have a disability, the [Centre for Accessible Learning](#) (CAL) can help you document your needs, and where disability-related barriers to access in your courses exist, create an accommodation plan. By making a plan through CAL, you can ensure you have the appropriate academic accommodations you need without disclosing your diagnosis or condition to course instructors. Please visit the CAL website for contacts and to learn how to get started:

<http://camosun.ca/services/accessible-learning/>

Academic Integrity

Please visit <http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.13.pdf> for policy regarding academic expectations and details for addressing and resolving matters of academic misconduct.

Academic Progress

Please visit <http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.1.pdf> for further details on how Camosun College monitors students' academic progress and what steps can be taken if a student is at risk of not meeting the College's academic progress standards.

Course Withdrawals Policy

Please visit <http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.2.pdf> for further details about course withdrawals. For deadline for fees, course drop dates, and tuition refund, please visit <http://camosun.ca/learn/fees/#deadlines>.

Grading Policy

Please visit <http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.5.pdf> for further details about grading.

Grade Review and Appeals

Please visit <http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf> for policy relating to requests for review and appeal of grades.

Mandatory Attendance for First Class Meeting of Each Course

Camosun College requires mandatory attendance for the first class meeting of each course. If you do not attend, and do not provide your instructor with a reasonable reason in advance, you will be removed from the course and the space offered to the next waitlisted student. For more information, please see the "Attendance" section under "Registration Policies and Procedures"

(<http://camosun.ca/learn/calendar/current/procedures.html>) and the Grading Policy at <http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.5.pdf>.

Medical / Compassionate Withdrawals

Students who are incapacitated and unable to complete or succeed in their studies by virtue of serious and demonstrated exceptional circumstances may be eligible for a medical/compassionate withdrawal. Please visit <http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.8.pdf> to learn more about the process involved in a medical/compassionate withdrawal.

Sexual Violence and Misconduct

Camosun is committed to creating a campus culture of safety, respect, and consent. Camosun's Office of Student Support is responsible for offering support to students impacted by sexual violence. Regardless of when or where the sexual violence or misconduct occurred, students can access support at Camosun. The Office of Student Support will make sure students have a safe and private place to talk and will help them understand what supports are available and their options for next steps. The Office of Student Support respects a student's right to choose what is right for them. For more information see Camosun's Sexualized Violence and Misconduct Policy: <http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.9.pdf> and camosun.ca/sexual-violence. To contact the Office of Student Support: oss@camosun.ca or by phone: 250-370-3046 or 250-3703841

Student Misconduct (Non-Academic)

Camosun College is committed to building the academic competency of all students, seeks to empower students to become agents of their own learning, and promotes academic belonging for everyone. Camosun also expects that all students to conduct themselves in a manner that contributes to a positive, supportive, and safe learning environment. Please review Camosun College's Student Misconduct Policy at <http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.5.pdf> to understand the College's expectations of academic integrity and student behavioural conduct.

Changes to this syllabus: Every effort has been made to ensure that information in this syllabus is accurate at the time of publication. The College reserves the right to change courses if it becomes necessary so that course content remains relevant. In such cases, the instructor will give the students clear and timely notice of the changes.