COURSE SYLLABUS

COURSE TITLE: GEOG-217-Maps and GIS

CLASS SECTION:

TERM: 2024F

COURSE CREDITS: 3

DELIVERY METHOD(S): Face-to-face



Camosun College respectfully acknowledges that our campuses are situated on the territories of the Lakwaŋan (Songhees and Kosapsum) and WSÁNEĆ peoples. We honour their knowledge and welcome to all students who seek education here.

INSTRUCTOR DETAILS

NAME: Emrys Prussin

EMAIL: prussine@camosun.ca

OFFICE: Fisher 250C

HOURS: Mondays 12:30 – 1:30 and Wednesdays 1:30 - 2:30

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

C in ENGL 170

CO-REQUISITE(S):

EQUIVALENCIES:

COURSE LEARNING OUTCOMES / OBJECTIVES

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

Describe basic concepts in mapping, including geo-referencing, scale, projection and map interpretation.

Differentiate between different types of maps.

Analyze GIS data and metadata to interpret digital maps.

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 or		
DATE RANGE	ACTIVITY or TOPIC	OTHER NOTES
1	Lecture: Intro to GIS and Data Models.	Assignment 1.
	Lab 1: Introduction to ArcGIS.	Text chapters 1, 2.
2	Lecture: Datums, Projections, and Co-ordinate Systems.	Assignment 2.
	Lab 2: Projections	Text chapter 3.
3	Lecture: Maps, Data Entry, and Cartography.	Assignment 3.
	Lab 3: Digitizing.	Text chapter 4.
4	QUIZ 1.	
	Lab 4: Digitizing Topology.	
5	Lab 4: Digitizing Topology.	
6	Lecture: Attribute Tables.	Text chapter 8.
	Lab 5: Digital Data and Basic Table Operations.	
7	Lecture: GNSS and Remote Sensing.	Assignment 4.
	Lab 6: Table Operations.	Text chapters 5, 6.
8	QUIZ 2.	
	Lab 7: Buffering and Overlay.	
9	Lecture: Basic Spatial, Raster, and Terrain Analysis.	Assignment 5.
10	Lab 8: Raster Analysis.	Text chapters 9, 10, 11.
10	Lecture: Spatial Estimation.	Assignment 6.
	Lab 9: Terrain Analysis.	Text chapter 12.
11	Lecture: Models and Modeling, Data Standards/Quality and	Text chapters 13, 14, 15.
	New Developments in GIS.	
	Lab 10: Sampling and Interpolation.	
12	QUIZ 3.	
	Lob 11. Fieldmans and Wohmers Aredisations	
12	Lab 11: Fieldmaps and Webmap Applications	
13	Lab 12: Intro to Cartographic Modeling Lab 13: Cartographic Modeling	
14	Lan 13. Caltographiic Modelling	<u> </u>

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 noticed is required. Deadlines can be reviewed on the <u>CAL exams page</u>. https://camosun.ca/services/academic-supports/accessible-learning/academic-accommodations-exams

DESCRIPTION		WEIGHTING
Labs		65%
Assignments		20%
Quizzes		15%
If you have a concern about a grade you have received for an evaluation, please come and see	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 <u>Grade Review and Appeals</u> policy for more information.

https://camosun.ca/sites/default/files/2021-05/e-1.14.pdf

Lectures

Will give the background information to gain a foundational understanding of principles that will be applied in the practical labs. All lecture slides will be posted to D2L.

Labs

There will be thirteen labs that will give you an opportunity to apply the principles learned in lectures. These will typically require the full lab period and will be posted to D2L. We will using ArcGIS Pro and a variety of different data sets. Labs are due one week after they are started, unless otherwise stated, and each lab is worth 5% of your final grade. All labs will be posted to D2L and data posted to the shared drive.

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 will be worth 5% of your final grade.

Assignments

There will be six 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 they may need to be done as homework if time does not permit. Each assignment is worth 3.3% of your final grade. All assignments will be posted to D2L.

Kahoots

These are online reviews we will do in class, they are not for marks but just for review of the material covered in that class. They will be available to you as a study tool outside of class, with links to each one posted to D2L.

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 <u>camosun.ca/services</u>.

Support Service	Website			
Academic Advising	camosun.ca/services/academic-supports/academic-advising			
Accessible Learning	camosun.ca/services/academic-supports/accessible-learning			
Counselling	camosun.ca/services/health-and-wellness/counselling-centre			
Career Services	camosun.ca/services/co-operative-education-and-career- services			
Financial Aid and Awards	camosun.ca/registration-records/financial-aid-awards			
Help Centres (Math/English/Science)	camosun.ca/services/academic-supports/help-centres			
Indigenous Student Support	camosun.ca/programs-courses/iecc/indigenous-student- services			
International Student Support	<u>camosun.ca/international</u>			
Learning Skills	camosun.ca/services/academic-supports/help- centres/writing-centre-learning-skills			
Library	camosun.ca/services/library			
Office of Student Support	camosun.ca/services/office-student-support			

Support Service	Website		
Ombudsperson	camosun.ca/services/ombudsperson		
Registration	camosun.ca/registration-records/registration		
Technology Support	camosun.ca/services/its		
Writing Centre	camosun.ca/services/academic-supports/help- centres/writing-centre-learning-skills		

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 Integrity

Students are expected to comply with all College policy regarding academic integrity; which is about honest and ethical behaviour in your education journey. The following guide is designed to help you understand your responsibilities: https://camosun.libguides.com/academicintegrity/welcome
Please visit https://camosun.ca/sites/default/files/2021-05/e-1.13.pdf for Camosun's Academic Integrity policy and details for addressing and resolving matters of academic misconduct.

Academic Accommodations for Students with Disabilities

Camosun College is committed to achieving full accessibility for persons with disabilities. Part of this commitment includes arranging appropriate academic accommodations for students with disabilities to ensure they have an equitable opportunity to participate in all of their academic activities. If you are a student with a documented disability and think you may need accommodations, you are strongly encouraged to contact the Centre for Accessible Learning (CAL) and register as early as possible. Please visit the CAL website for more information about the process of registering with CAL, including important deadlines: https://camosun.ca/cal

Academic Progress

Please visit https://camosun.ca/sites/default/files/2023-02/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 https://camosun.ca/sites/default/files/2021-05/e-2.2.pdf for further details about course withdrawals. For deadline for fees, course drop dates, and tuition refund, please visit https://camosun.ca/registration-records/tuition-fees#deadlines.

Grading Policy

Please visit https://camosun.ca/sites/default/files/2021-05/e-1.5.pdf for further details about grading.

Grade Review and Appeals

Please visit https://camosun.ca/sites/default/files/2021-05/e-1.14.pdf for policy relating to requests for review and appeal of grades.

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 (see Medical/Compassionate Withdrawals policy). Please visit https://camosun.ca/services/forms#medical to learn more about the process involved in a medical/compassionate withdrawal.

Sexual Violence

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 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 Policy: https://camosun.ca/sites/default/files/2021-05/e-2.9.pdf and camosun.ca/services/sexual-violence-support-and-education.

To contact the Office of Student Support: oss@camosun.ca or by phone: 250-370-3046 or 250-370-3841

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 https://camosun.ca/sites/default/files/2021-05/e-2.5.pdf to understand the College's expectations of academic integrity and student behavioural conduct.

Looking for other policies?

The full suite of College policies and directives can be found here: https://camosun.ca/about/camosun-college-policies-and-directives

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.