

COURSE SYLLABUS



COURSE TITLE: ICS 221 Web Services

CLASS SECTION: All Sections

TERM: Winter 2022

COURSE CREDITS: 3

DELIVERY METHOD(S): Blended, In-class and D2L

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](#).

For COVID-19 information please visit <https://legacy.camosun.ca/covid19/index.html>.

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 explanation in advance, you will be removed from the course and the space offered to the next waitlisted student.

INSTRUCTOR DETAILS

NAME: Jason Cumiskey

EMAIL: cumiskey@camosun.bc.ca

OFFICE: TEC249

HOURS: 9:30 – 10:20 W or by appointment

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

Learn how to create and deploy a web application. You will design and implement dynamic web-based applications utilizing the tools and technologies that enable interoperability between software systems. This interoperability is the foundation for modern service oriented architecture.

PREREQUISITE(S): C in ICS 211

CO-REQUISITE(S):

EXCLUSION(S):

COURSE LEARNING OUTCOMES / OBJECTIVES

- a) Describe web services, the need for web services, and the principles of service-oriented architecture;
- b) Design, implement, test, debug, optimize and deploy web-based applications and web services using modern technology;
- c) Use development tools to create and interact with web services;
- d) Identify and select the appropriate framework components in the creation of web service solutions;
- e) Apply object-oriented programming principles to the creation of web service solutions;

- f) Apply accepted standards to ensure security, privacy, and integrity of web services while recognizing the ethical, legal, and social implications of web services implementations.
- g) Apply accepted standards to ensure security, privacy, and integrity of data while recognizing the ethical, legal, and social implications of web applications.

REQUIRED MATERIALS & RECOMMENDED PREPARATION / INFORMATION

- a) TEXT: No formal textbook required. Links to Online resources and suggested books will be provided.
- b) OTHER: Although not required, a personal laptop would be an asset.

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 (Jan 10)	Course Outline, ICS 211 Recap, Universal JavaScript	Lab 1 assigned
2 (Jan 17)	Intro to Web Services, Node and NPM	Lab 1 Due, Lab 2 assigned
3 (Jan 24)	Next.js, data validation	Lab 2 Continued
4 (Jan 31)	Designing a RESTful API	Lab 2 Due, Lab 3 assigned
5 (Feb 7)	Implementing a RESTful Web Service	Lab 3 Due, Lab 4 Part 1 assigned
6 (Feb 14)	Universal JavaScript with Next.js	Lab 4 Part 1 Due, Lab 4 Part 2 assigned
7 (Feb 21)	***FAMILY DAY AND READING BREAK***	
8 (Feb 28)	MID-TERM, Wed. March 2	Lab 4 Part 2 Due, Lab 5 Assigned
9 (Mar 7)	NoSQL, MongoDB, and Mongoose	Lab 5 Due, Lab 6 Assigned
10 (Mar 14)	Intro to Web Security	Lab 6 Due, Lab 7 Assigned
11 (Mar 21)	Web Security Authentication	Lab 7 Due, Lab 8 Part 1 Assigned
12 (Mar 28)	TBA	Lab 8 Part 1 Due, Lab 8 Part 2 Assigned
13 (Apr 4)	TBA	Lab 8 Part 2 Due, Lab 9 Assigned
14 (Apr 11 - FRI holiday)	Review	Lab 9 Due
15 (Apr 19 – MON Holiday)	Final Exam	Date and Time TBA

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 [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: You must complete all labs to pass the course. <u>You must achieve a minimum average of 55% on the labs.</u>	20%
Mid-Term: There will be one Mid-Term test. <u>You must attempt the Mid-Term to pass the course.</u>	30%
Final Exam: 30% is D2L Theoretical Exam, 70% is Practical Programming Exam. <u>You must achieve a combined minimum average of 55% on the Final Exam to pass the course.</u>	50%
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.

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COURSE GUIDELINES & EXPECTATIONS

You can hand in Labs up to one week late from their due date/time at a 50% penalty. After one week late, you will be graded a zero but MUST STILL COMPLETE ALL LABS TO PASS THE COURSE. Exceptions will ONLY be given for dire and documented short-term medical or family emergencies.

SCHOOL OR DEPARTMENTAL INFORMATION

<https://camosun.ca/programs-courses/find-program/information-and-computer-systems-technician-certificate>

<https://camosun.ca/programs-courses/find-program/information-and-computer-systems-technologist-diploma>

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/>.

Support Service	Website
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](http://camosun.ca/services/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.