COURSE SYLLABUS

COURSE TITLE:	ICS211 Web Applications
CLASS SECTION:	X03A, X03B
TERM:	Fall 2022
COURSE CREDITS:	3
DELIVERY METHOD(S):	Face-to-face

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:	Brandon Devnich
EMAIL:	devnichb@camosun.bc.ca
OFFICE:	TEC 170
HOURS:	By appointment in person or via Collaborate

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

Students will expand their knowledge in website building by adding dynamic and interactive components. Through applied activities, students will be introduced to how client-side scripts interact with server-side programs and back-end concepts and tools for end-to-end (e.g., full-stack) web development.

PREREQUISITE(S):	C in ICS 121 or ICS 128
	and
	C in ENGR 155, or ICS 125
CO-REQUISITE(S):	-
EXCLUSION(S):	-

COURSE LEARNING OUTCOMES / OBJECTIVES

Learn web technologies to create dynamic and interactive web applications. You will learn the underlying client- and server-side web technologies to create dynamic web applications. The intended learning outcomes are as follows:

- Design, implement and test a web application using current web technologies including client-side markup, server-side programming for data processing and authentication techniques.;
- Describe the major areas and challenges of web programming;
- Explain the function of each web application component using domain-specific terminology;
- Describe different security issues with web applications and apply the appropriate technique to secure data integrity; and
- 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

- Materials on the D2L course page: presentation slides for lectures, lab assignment instructions for labs, etc. see https://online.camosun.ca/d2l/home/241262

- Required Textbooks
  - None

- Recommended Hardware
  - Although not required, a personal laptop would be an asset.

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

The course will meet once a week over a 14-week semester. Each week will consist of a two-hour lecture and one three-hour lab. Additional time over and above the allotted lab time may be required to complete lab assignments.

Lectures will be delivered in-person at regular times. Recordings of lectures may be made available.
Labs will be assigned and completed most weeks with the exception of the week of the Thanksgiving holiday (week 6).

The instructor will be available during the regularly scheduled lab time either person. There will be no formal collaborate sessions for labs. While labs can be done from home, provided you have an internet connection, students who attend lab in-person will receive priority assistance.

Please see lecture and lab schedule at http://my.camosun.ca for detailed information about class hours and locations. Please consult the calendar tool in D2L frequently for any updates.

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

Week	Start	Topics	Labs
1	Sept 5	Course Outline, Introduction to Web Apps, Visual Studio Code	Lab 0 – Setting Up Your Development Environment
2	Sept 12	JavaScript Review	Lab 1 – JavaScript Review
3	Sept 19	Web Apps, AJAX, SOP, and DOM	Lab 2 – SOP, AJAX, XSS, SQLi
4	Sept 26	React and JSX	Lab 3 – Creating a Static HTML Page by Manipulating the DOM
5	Oct 3	Term Test #1 / React Components	Lab 4 – React Components
6	Oct 10	No Lecture	No Lab
7	Oct 17	ES6 and React Components	Lab 5 – ES6-izing and Styling Your React Components
8	Oct 24	Styling React Components	
9	Oct 31	Term Test #2 / Hooks, Lifecycle, State, JSON	Lab 6 Part 1 – Fetching Data From a JSON-based API
10	Nov 7	Async, Promises, Fetching	Lab 6 Part 2 -- Fetching Data From a JSON-based API
11	Nov 14	DOM Events and Forms	Lab 7 Part 1 – Adding a Form to Your Application
12	Nov 21	Term Test #3	Lab 7 Part 2 – Submitting Your Form
13	Nov 28	UX Design and Client-side Routing	Lab 8 – Material UI and React Router
14	Dec 5	Review	

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 scan be reviewed on the CAL exams page. http://camosun.ca/services/accessible-learning/exams.html

EVALUATION OF LEARNING

DESCRIPTION	WEIGHTING
Lab Assignments Must achieve a 55% minimum average and complete **all** labs.	20%
Term Tests Three tests closed-book. You must complete all term tests to pass the course.	30%
Final Exam Theoretical worth 15%, Practical worth 35%. Must have a combined min average of 55% to pass the course.	50%
TOTAL	100%

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

COURSE GUIDELINES & EXPECTATIONS

Late assignments and/or labs will not be accepted, except by the instructor's prior written permission or in the presence of a dire and documented short-term medical or family emergency. Student must complete **all** labs.

Students must achieve

- a minimum 55% combined average on the final exam, and
- a minimum 55% average in labs
- all labs must be completed
- all term tests must be completed

to pass the course.

Must achieve a C (60%) in the course to use as a pre-requisite.

SCHOOL OR DEPARTMENTAL INFORMATION

Supplemental department policies:

Grade review: You have 7 days after marks are posted to review with your instructor.

Academic Integrity Violations:

- 1st violation: minus the weight of the deliverable and a note on your departmental file.
- 2nd violation: F in the course
- 3rd violation: Student Conduct Policy E-2.5 is applied

Missed Examinations/Quizzes: If a student misses a quiz, project or an exam, a mark of zero will be assigned unless there are extenuating circumstances. You must provide a note from a medical practitioner (Doctor, Nurse, Psychologist, Counsellor, etc.) In such cases, the proportion of grade assigned to the missed quiz or exam will be added to the proportion assigned to the final exam.

Electronic Devices: The school's policy regarding electronic devices is that any student who has a cell phone or other unauthorized electronic device (ie. ipad, laptop, playbook, etc.) on their person or around their desk during a closed-book exam will be guilty of cheating and will receive a grade of "F" for the course.

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 (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.