

DOUGLAS COLLEGE
COMMERCE AND BUSINESS ADMINISTRATION
COURSE INFORMATION AND SCHEDULE
CSIS 3380 – Advanced Web Programming

Semester:	Summer 2021	Time:	Tuesdays 15:30 – 18:20
Section:	003	Venue:	Online
Instructor:	Reza Ghaeli	Email:	ghaelim@douglascollege.ca
Office:	Online	Office Hours:	18:30 – 19:00 or by appointment

Note: Only emails originated from your Douglas College email will be answered. Your emails should contain your Course Name and Section.

COURSE MATERIALS REQUIRED

Various Resources will be introduced during the course. Students are encouraged to have their text books covering the prerequisites specially on HTML, CSS, and Javascript handy.

Generic hardware and software requirements

Hardware	Quad-core CPU 16 GB RAM 512 GB Storage FHD (1920x1080) minimum resolution display Wifi/Ethernet Built-in or external Web Camera
Browser(s)	Chrome/Firefox (or your preferred browser)
Peripherals	headset w/ mic, or (mic and speaker), and webcam

Computer and Internet Connection: Students must have access to a reliable computer with high-speed internet access allowing the use of a conferencing system such as BB Collaborate Ultra.

Software: Visual Studio Code (<https://code.visualstudio.com/download>)

Software: Zoom (<https://zoom.us/download>)

Also, students will have to install few software and run apps on their browsers. Software to install include your text editor of choice (Visual Studio Code is recommended), Browser (Chrome, Firefox, recommended), Node.js among others. Different packages may be introduced.

Note: It is the responsibility of the students to setup their software and hardware. It is expected that students can find proper resources and be able to configure their systems.

ONLINE COURSE MATERIALS

All instructor materials, resources, assignments and communication such as announcements, course messages and other resources will be shared through Douglas College Blackboard Community. Unless it is specifically mentioned, all assignments should be submitted through Blackboard. It is the students' responsibility to check the announcements before coming to class. All documents as well as media, including classroom recordings, projects, and instructional material are copyrighted and are solely for the purpose of the students. Distribution of the material in any form is strictly prohibited. Specifically, recordings of the classroom instructions by students should not be shared or distributed.

COURSE DESCRIPTION

This course provides the fundamental knowledge necessary to design and develop dynamic Web pages using JavaScript. Students will learn the fundamental aspects of the JavaScript programming language and how to program using document object model application programming interface (DOM API) to modify, traverse, and append nodes to web documents. The course will also introduce students to client-side JavaScript libraries (e.g., jQuery), frameworks (e.g., Angular.js), and design patterns (e.g., MVC pattern) and how client-side scripts interact with server-side programs using Ajax. Furthermore, the course will introduce students to back-end concepts and tools for end-to-end (i.e., full-stack) JavaScript web development, including back-end JavaScript frameworks (e.g., Node.js), REST concepts and NoSQL databases. Students will learn how to architect, develop, test, secure, deploy and manage a RESTful Web Service. Comprehensive hands on exercises are integrated throughout the course to reinforce learning and develop real competency.

LEARNING OUTCOMES

- At the end of this course the successful student will be able to:
- Explain client-side concepts and compare and contrast client-side versus server-side scripting.
- Use JavaScript to add dynamic content to pages.
- Write well-structured, easily maintained JavaScript code following accepted good practice.
- Write JavaScript code that works in all major browsers.
- Program using DOM API to traverse, modify, and append nodes to documents.
- Use event handlers to handle user-triggered events.
- Use JavaScript to validate form data and to manage state information.
- Effectively debug JavaScript code, making use of good practice and debugging tools.
- Use front-end JavaScript libraries (e.g., jQuery), frameworks (e.g., Angular.js), and design patterns (e.g., MVC) to create dynamic pages.
- Use Ajax to fetch information from the server and display it on the web page.
- Create web applications with Ajax.
- Demonstrate an understanding of server-side (i.e., back-end) concepts and server-side scripting (e.g., using either PHP or a JavaScript framework) for web development.
- Build and configure a back-end server using a JavaScript framework (e.g., Node.js).
- Build a RESTful API for the front-end to access back-end services.

GENERAL GUIDELINE

This is not an easy course. Students must have strong knowledge of HTML, CSS, and Javascript, and be ready to challenge developing web applications. This course focuses on coding to learn. The learning requires a lot of debugging and learning on your own. You will be instructed the concepts, techniques, and skills you need to put together real applications, but must be ready to debug your own code and get it to work. Students will have to challenge themselves and find many of their solutions through online and written resources and cannot expect the instructor or other college resources check all their code.

This course will be conducted in online format, through different methods, including virtual sessions, written tutorials, and by correspondence. Students must have access to a computer to

complete this course. All course material, lectures, assignments, discussions, etc. are posted on the Douglas College Community Blackboard course management system.

https://learn.douglas.bc.ca/webapps/portal/execute/tabs/tabAction?tab_tab_group_id= 381_1

Attendance and Participation

Students are expected to prepare for, attend and actively participate in all class sessions and exercises, to do or sit the required tests, quizzes and examination, to submit assignments and projects, and to deliver an oral presentation as and when required.

If missed, certain assessments such as labs, quizzes, assignments, presentations cannot be taken at a later stage.

If there is a medical reason please submit, to your instructor as soon as possible a medical note from a BC registered doctor that must have: clinic letterhead with contact info (address, telephone number), the number of days covered by the note, the doctor's full name (no initials) and the doctor's signature. Only the original note is accepted; no scans, photocopies or faxes. No nurse notes will be accepted.

COMMUNICATION WITH INSTRUCTOR

All academic related communication through emails must originate or destined from/to a valid xxxxxxxx@xxxxxx.douglascollege.ca email address. **Include your Course and Section number in the Subject line** of your email. Emails originated from a different email address or without proper subject line will be disregarded due to communication management and security reasons.

ONLINE SPECIFIC GUIDELINES

The minimum requirements to attend Douglas College's online courses are published on the college's website. Instructor could use any combination of the college's available services in order to deliver the course. The student is advised to make sure that all the hardware/software that he/she intends to use during the semester are following the college's published minimum requirements. In order to maintain overall standards, unless agreed in advance by the instructor, the student may not use non-approved hardware/software. Using non-approved hardware/software may put the student in a difficult situation to complete the course assessments.

<https://www.douglascollege.ca/student-services/essential-resources/online-learning/Online-Learning-Requirements>

REGULATIONS FOR STUDENTS

Assignment due dates: Every assignment will be given a due date. Students are responsible for submitting the assignment to blackboard properly before the due date. **NO late assignments will be accepted.**

Quizzes and examinations: Quizzes and examinations will be held according to the schedule. If you have a doctor documented illness which prevents you from writing the test on schedule, please bring it to my attention prior to the quiz/exam. Missing a quiz/exam without a valid medical excuse will result in a mark of "0". Please note that a simple doctor's note is NOT good enough. You must provide a letter from your doctor outlining your medical conditions that prevent you from writing the test. **The letter should be sent to me by your doctor or clinic center's staff using their official email.** Your doctor must also be available on the phone to confirm such medical conditions with the instructor.

You must answer the questions and submit the answers before the end of the test as instructed. Failing to upload the relevant files will result in no mark in these questions.

Rules and Regulations for Tests/Exam: When use of computer is allowed, you are NOT allowed to use the internet for web browsing and/or communication. Except for the permitted application(s), you are required to close and unpin the web browser and ALL applications on the computer. Communicating and exchanging information with others are not allowed. Violation of the above rules and regulations will result in a mark of “0” and will be asked to leave the test/exam venue immediately.

Illness and other unavoidable circumstances: Should you miss an assignment deadline, a quiz, or an examination due to unavoidable circumstances or personal difficulties, please email me at wongi5@douglascollege.ca within 24 hours of the deadline or at your earliest opportunity. On the email include

- course and section number (e.g. CSIS3275-070)
- your name and student number (e.g. Student Number 212121212)
- late assignment or missed quiz (e.g. Missed Quiz #1)
- have doctor’s letter or not (e.g. Have Doctor’s Letter)
- brief comment.

We can discuss the most appropriate course of action that will lead to fair evaluation of your overall learning in the course. No make-up quiz/exam will be held in any circumstance.

Preparation, Attendance and Participation: Attendance will be taken on a frequent but irregular basis. Even though the course is delivered online the students are expected to prepare for, attend and actively participate in all class sessions and exercises, to sit the required tests, quizzes and examination, to submit assignments and projects, and to deliver an oral presentation as and when required.

The method of delivery includes classroom discussion and lab exercises; and students need to be present both in order to participate and to learn. Your final mark depends in part on your record of attendance and your reasonable preparedness to contribute to the discussion. In the curriculum outline on the next page, reading assignments are included for each day’s class: it is your responsibility to have completed the reading and to have absorbed the material sufficiently well for spontaneous discussion. Students are expected to behave appropriately while attending Douglas College. While in class, please turn off (or do not bring) your cell phone. Cell phones going off in the middle of class are disruptive and exhibit a lack of consideration for your fellow-student.

Dispute over assessments or marks: Any dispute over the assessments or marks has to be brought to the attention of instructor within seven days after the marks are published except for the final exam. For the final exam, disputes over marks must be sent within 48 hours after the marks are announced. After the above-mentioned timeframes, the marks are official and there may be no possibility for further reviews. It is the responsibility of the students to check the announcements or check their marks.

Academic Integrity: The College values academic integrity.

Plagiarism is presenting or submitting as one’s own work, research, words, ideas, artistic imagery, arguments, calculations, illustrations or diagrams of another person or persons without explicit or accurate citation or credit; this includes submission of purchased material as well as material in which the student has permitted someone else (a fellow student, tutor, mentor or teaching assistant, friend, etc.) to contribute unacknowledged. Persons include past and current students. Unless explicitly awarded by the Instructor, in a written document or communication, the right to submit common/team work by two or more students, the submission/presentation is considered plagiarism.

Self-plagiarism is submitting one's own work for credit in more than one course without the permission of the instructors, or re-submitting work, in whole or in part, for which credit has already been granted.

Cheating is the possession or provision of unauthorized aids, assistance or materials in the preparation of assignments, during examinations or in the completion of practical work (in clinical, practicum or labs).

See the Academic Integrity policy for other definitions of academic dishonesty. Academic dishonesty will be treated as a serious offence. Disciplinary measures can range from a zero grade on the exam or assignment for which the offence occurred to suspension or expulsion from the College. The use and/or reference of any/all websites (e.g. coursehero.com or similar) which host copies of Douglas College course work assessments such as but not limited to quizzes, assignments, midterms, labs, exams, practical work, etc., constitutes plagiarism. Douglas College condemns cheating or attempted cheating within its community. Regarding the details of the policy on Academic Integrity Policy, please visit

<https://www.douglascollege.ca/sites/default/files/docs/finance-dates-and-deadlines/Academic%20Integrity%20Policy%20w%20Flowchart.pdf>

Student Effort: In addition to the regularly scheduled times for classes and labs, students are expected to spend at least 6 hours a week on this course. If you find yourself regularly spending time significantly in excess of this, come and discuss this as soon as possible.

CLASS CANCELLATION

In the event that a class is cancelled due to instructor illness or other unforeseen circumstance, a notification will be made through **Blackboard** to every student enrolled in the course. It is the responsibility of students to be proactive and to check their announcements and/or e-mail before coming to class. Every effort will be made to ensure that the notification is made as soon as possible.

Student responsibility regarding announcements

Students are responsible for all the announcements made in the classroom and lab concerning course information and schedule changes **WHETHER OR NOT** they are in attendance.

ASSESSMENT GUIDELINE

EVALUATION

A final course grade will be determined based on the following instruments and their corresponding weighted percentages:

Labs/Assignments/Projects	30%
Tests and Quizzes	15%
Mid-term examination	25%
Final examination	30%

In order to pass the course, students must, in addition to receiving an overall course grade of 50%, also achieve a grade of at least 50% on the combined weighted examination components (including quizzes, tests, exams).

IMPORTANT NOTE:

1. **Passing grade is 50% with the additional condition that the total value of proctored assessments (quizzes, midterm and final) aka “MOA mark” have to average a minimum of 50%. *Example: In this case the total value of proctored assessments is 30%+30%+20%=80%. Minimum 50% of the total is 40%. So, in order to pass you need a minimum of 50% overall mark and an average minimum of 40% for the total of proctored assessments.***
2. **A UN marks will be issued if the student completed less than 70% of the total evaluation of the course, or missed more than 30% of the classes where the Instructor’s Course Outline specifies that attendance is a course requirement.**

Missed tests or examinations

Tests (quizzes, Midterms)and final examination will be offered only during the scheduled date and time of sitting. Exceptions may be considered in cases of extraordinary circumstances. It is the responsibility of the student to inform the College and the instructor at the earliest reasonable opportunity if he/she intends to miss a test or examination. Otherwise, the student will receive a **ZERO** Mark for any missed Quizzes and will receive a **UN** as the final course grade for missing the **FINAL** examination.

ASSIGNMENTS

Assignment/Lab Submission (by Blackboard)

Assignments submitted by Blackboard must be submitted before the deadline, which is the beginning of the class period on the scheduled date and time when the assignment is due. Unless otherwise communicated by the instructor, Blackboard will not accept late assignments.

The assignment **MUST** be in a Microsoft Word/Excel/PowerPoint (*choose the appropriate combination*) format and the name of the file **MUST** contain the student’s full name, student ID and assignment number.

Inside the assignment file the information **MUST** contain the student’s full name, student ID and assignment number.

If the assignment is not in the correct format or it is submitted without a valid student full name or student ID will receive a 0(zero) mark.

Regardless of the assignment submission method, unless otherwise communicated/agreed by/with the instructor, late assignments will **NOT** be graded and receive an automatic **ZERO MARK** and will count towards a **UN** mark requirement

Assignment Work

Unless otherwise communicated in the course outline or by the instructor, all assignments are considered **INDIVIDUAL** work. Submitting assignments by two or more students that contains substantially common work is considered plagiarism. Not using quotations and references is also considered plagiarism. See above.

Extra Copies of Assignment

Students are advised to keep extra copies (i.e. photocopies or file backups) of their assignments in case of any possible misplacement or digital data loss.

QUIZZES/TESTS

Unless otherwise stipulated in the course outline or by the instructor, quizzes/tests, midterms, labs, etc. will take place at the beginning of the class at scheduled date and time. There is no additional time awarded in case the student is late. The student will only have use of the time between his/her arrival and the scheduled end. Failure to attend quiz/test will cause the student to receive a ZERO MARK and will count towards a UN mark requirement. See “Missed Tests or Examinations”

LAB ASSIGNMENTS

Lab Assignment General

Students MUST prepare in advance for the lab by printing their lab assignment before the lab session. The must also bring/prepare any additional material as required by the lab assignment or instructor. Not being prepared for the lab session as required by the printed assignment or the instructor is not considered an excuse.

Unless otherwise agreed with the instructor, students MUST submit their completed assignments before the end of the lab session.

Arriving Late to a Lab Session

Due to the amount of work required during the lab and the inability to re-schedule labs, it is important for students to arrive to lab on time. Unless otherwise agreed with/by the instructor, students arriving late for the lab session may have up to 50% of the marks allocated for the lab deducted from the lab mark.

Late Lab Assignments

Late lab assignments will NOT be graded and receive an automatic ZERO MARK with the exception of extraordinary circumstances or prior arrangements with the instructor. Any submission beyond the granted extension will not be graded and the student will receive ZERO MARK for that assignment. All late lab assignments will be submitted by email or in person, within the allocated extension time. The email must originate from a (...@douglascollege.ca) valid email address. Any other originating email address will be disregarded and the assignment will receive ZERO marks. Submission by another person will be discarded and the assignment will receive ZERO marks.

Material used in Exam (Midterm or Final)

Any material such as printed documents, scratch papers, notes, any other papers used during the examination, CDs, USB flash drives will be returned to the instructor at the end of the exam before leaving the exam room. In addition, for exams that make use of computers in fix or mobile labs, it is strictly forbidden to remove material from the exam room by emailing or posting it to websites. Removing any material from the exam room without the instructor's explicit permission will cause the exam to be scored at 0 (zero) marks and the behavior will be reported to the CBA management

CHANGES TO THE COURSE OUTLINE AND SCHEDULE

The course outline and/or schedule are subject to change (Consistent with College Policy and with notice to the students).

Please check the examination schedule as soon as it becomes available for potential scheduling conflicts.

Douglas College Grading System			
Grade	Numerical Value	Achievement Level	Description
	Percentage	Letter Grade	GPA
	95-100%	A+	4.33
	90-94%	A	4.00
	85-89%	A-	3.67
	80-84%	B+	3.33
	75-79%	B	3.00
	70-74%	B-	2.67
	65-69%	C+	2.33
	60-64%	C	2.00
	55-59%	C-	1.67
	50-54%	P	1.00
	Below 50%	F	0.00
		FD	0.00
		UN	0.00
		W	N/A
FD	0.00	Failure due to Dishonesty	
UN	0.00	Student completed less than 70% of the total evaluation of the course, <u>or missed more than 30%</u> .	
W	N/A	Does not include in GPA calculation.	

CSIS 3380-002 TIME LINE

The nature of this course is all parts of the course work together. There will be a lot of forward and backward teaching on different topics. However, the following timeline describes the focus of different sessions. Depending on the student's progress and speed of learning the topics may be moved around. The goal is to cover all sections. However, depending on many factors, we may have to modify Please check the course outline often to make sure you are prepared for the upcoming topics and are aware of changes.

Wk		Topic
1	May 11	Course Objectives and Structure Course Introduction Tools and resources Review HTML, CSS, JavaScript (variables, loops, conditionals, etc.) Introduction to Frontend and Backend (Node.js) Javascript Refresher A Javascript Case Program Analysis
2	May 18	Javascript DOM Programming Exercises
3	May 21	Node.js
4	Jun 01	Node.js Express.js Quiz 1
5	Jun 08	Front End Libraries, jQuery, jQuery UI
6	Jun 15	AJAX Fetch API
7	Jun 22	Programing Case and Practices
8	Jun 29	Midterm 1
9	Jul 06	AJAX server side intro to React.js
10	Jul 13	React.js continued, React Props, Map Programming Case
11	Jul 20	React Stateful Components Data Sharing Between Components
12	Jul 27	Using Databases Relational Databases NoSQL Databases- MongoDB Intro Quiz 2
13	Aug 03	MongoDB – ATLAS CRUD Programming Full Stack Case using MERN
14	Aug 10	

Note that the exact course content and schedule of topics shown above may be altered at the instructor's discretion. *Exam dates will NOT be changed to accommodate your travel plan. You must not make any travel arrangement on or before your exam.*