CS1046
(Wed Jan 05, 2022 01:00 AM - Tue May 31, 2022 01:00 AM)

Western University
London, Canada
Department of Computer Science

COMPUTER SCIENCE 1046b

-- Approachable Apps: A Gentle Introduction to Programming using JavaScript --

Winter 2022

COURSE OUTLINE

COURSE DESCRIPTION

This course will introduce students to basic programming concepts such as variables, control structures and loops. The programming language JavaScript will be used to illustrate these concepts. Students will only need a web browser and text editor to complete all required work. At the beginning of the course, students will also be required to learn a bit of HTML and CSS before learning any JavaScript. This course is intended for students with no background in programming. This is a blended course, students will do most of the work on-line but will be required to meet face to face every 2 weeks for 2 hour group work sessions. During these sessions students will solve small problems in groups of 2-4 students.

PREREQUISITES

This student should be able to use a Web Browser, and a Text Editor (such as Notepad++) and have basic computer skills (e.g., an understanding of how folders and sub-folders work, how to save a file). Note: you may NOT take this course concurrently or after you have take CS1026 or CS2120 or ES1036. You will LOSE that credit if you take CS1046 at the same time or after those courses! You may take CS1046 BEFORE CS1026, CS21220 or ES1036 without losing either credit.

INSTRUCTORS:

<table>
<thead>
<tr>
<th>Section</th>
<th>Lecturer</th>
<th>Meeting Times and Location</th>
<th>Office Email</th>
<th>Office Hours</th>
<th>Phone Extension</th>
</tr>
</thead>
<tbody>
<tr>
<td>001</td>
<td>Laura Reid</td>
<td>Every other Monday in FNB 2210 at 9:30am to 11:30am</td>
<td>MC 416</td>
<td>Mondays 1pm - 2pm, Tuesdays 10:00am-11:00am, Other times available by email appointment</td>
<td>86905</td>
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</tbody>
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TEXTBOOK

JavaScript and JQuery : Interactive Front-End Web Development by Jon Duckett published by Wiley

COURSE CONTENT

Course content can be accessed from OWL found at http://owl.uwo.ca You are responsible for reading this information frequently. This site contains:

- Weekly Lecture Notes/Videos
- On-line Quizzes
• Assignments
• Lab Exercises
• Announcements
• Consulting Schedule
• Other Important Information

REQUIRED MATERIAL
Due to COVID, this course requires you to have the following course materials

• laptop
• working microphone and webcam
• reliable internet connection

LECTURE TOPICS
1. What is a program, a web browser, a web server, a web page
2. Using HTML tags and elements to create the content of a web page
3. Using CSS to modify the look of a web page
4. Using JavaScript to give a webpage some functionality
5. Variables
6. Functions
7. Operators
8. Control Statements and Loops
9. Arrays
10. Event Handlers and the DOM
11. Strings and String Manipulation
12. Brief intro to JQuery (Optional - depends on timing)

EMAIL CONTACT
We will occasionally need to send email messages to the whole class or to students individually. Email will be sent to the Western email address assigned to students by Information Technology Services (ITS). It is each student’s responsibility to read this email on a frequent and regular basis, or have it forwarded to an alternative email address if preferred. See the ITS web site for directions on forwarding email. You are responsible for checking your email at least every 72 hours as this will be instructors main method of communicating with the students outside of lectures.

However, you should note that email at WTS (your Western account) and other email providers such as gmail or yahoo.com may have quotas or limits on the amount of space they can use. If you let your email accumulate there, your mailbox may fill up and you may lose important email from your instructors. Losing email that you have forwarded to an alternative email address is not an excuse for missing out on important information.

You are encouraged to contact the course instructor via email, with brief, email appropriate questions regarding lecture material or clarification of assignments. However, please check the course web site for answers to frequently asked questions, or to see if the information is already there, before emailing the instructor.

Note: You must send email from your Western account, and start the subject line with CS1046 followed by whatever else you want to put in the subject line. Other email may be filtered out. Please send email in plain text format.

STUDENT EVALUATION

<table>
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<tr>
<th>Evaluation Type</th>
<th>Due Date/Description</th>
<th>Overall weight within the course</th>
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<tbody>
<tr>
<td>Self Assessment</td>
<td>There will be 5 bi-weekly quizzes. Each quiz will consist of 15-20 questions that review the previous two week’s topics. Each quiz is worth 3%. The lowest quiz mark will be dropped. The quiz MUST be completed during the a given time</td>
<td>12%</td>
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https://owl.uwo.ca/portaltool/18c8bf88-692d-421c-8bd3-4b10cd5ee0cd/printFriendly
quiz will only be open during those hours). This quizzes are held the NIGHT BEFORE A FLIPPED CLASSROOM in order to make sure you know the material before meeting for the flipped classroom. Thus, the quiz due dates are Sunday, January 23, Sunday, February 6, Sunday, February 27, Sunday, March 13 and Sunday, March 27. You will be given 1 hour to complete the quiz. The quiz will be open from 9:00pm (London, Ontario TIMEZONE) till 11:55pm on the above Sundays listed.

During each of your 5 bi-weekly group meeting, you will have an activity to work on. Each activity will be worth 2%. You must attend ALL 5 Flipped Classroom Sessions. The dates are: Monday, January 24th, Monday, February 7th, Monday, February 28th, Monday, March 14th and Monday, March 28th. We will use Zoom for the first two flipped classrooms.

There will be 10 labs. Each lab will have components that must be submitted to OWL to be checked. The labs are normally pass/fail however you can lose a portion of the grade at the discretion of the instructor (e.g. if the submitted code doesn't work). You will have 1 week to hand in your lab (you can hand it in any time during the week that the lab is schedule to be completed, as long it is handed in BEFORE the Sunday at midnight of that week). Each lab is worth 2%. THE LABS ARE CRITICAL IN UNDERSTANDING THE MATERIAL. I will drop your lowest lab but you should still attempt every lab in order to understand the material. Lab 1 and Lab 2 will BOTH be due on Sunday, January 23 so that we can accommodate people during the Add/Drop Period. After that the labs will be due as follows: Lab 3 on Sunday, Jan 30, Lab 4 on Sunday, Feb 6, Lab 5 on Sunday, Feb 13, Lab 6 on Sunday Feb 27, Lab 7 on Sunday, March 6, Lab 8 on Sunday, March 13, Lab 9 on Sunday, March 20 and Lab 10 on Sunday, March 27.

| Assignment 1 - Using HTML and CSS and JavaScript | Monday, Feb 7 at 11:55pm | 5% |
| Assignment 2 - Using Variables, Ifs and Arrays | Monday, March 7 at 11:55pm | 8% |
| Assignment 3 - Putting it all together | Monday, April 4 at 11:55pm | 12% |
| Final Exam | TBA | 35% |

If, for any reason, the instructor can not adhere to the assignment schedule given above, the assignment marks will be pro-rated.

**EXAM**

The final exam will be 3 hours in length and will consist of multiple choice and short answer questions. The date, time and location of the final exam will be announced by the Registrar's Office.

Students requesting a deferred final exam must supply their academic counselling unit for their home faculty with written documentation. Your lecturer CANNOT grant a request for a deferred final exam. Only a student's academic counselor from their home faculty can approve a request for a deferred final exam.

For computer-marked multiple-choice exams, the exams will be filtered through a piece of software that checks for unusual coincidences in answer patterns that indicates cheating has occurred.

**NOTE - IF the course continues to be completely online until May due to Covid, we will be using ProctorTrack for the final exam.**

No electronic devices or textbooks are allowed but you are allowed one 8½ by 11 sheet of paper as a study aid during the exam. You may have writing (typed or handwritten) on BOTH sides of the paper.
NOTE: To be eligible to pass the course, a student must obtain at least 40% on the final exam. If you do not get more than 40% on the exam, you cannot get a grade higher than 45% for the course.

ASSIGNMENTS

Submission of Assignments

All assignments must be submitted electronically. Instructions on how to submit your assignments are contained within each assignment instructions. All assignments are INDIVIDUAL assignments. You may work with other people to understand the concepts but the work done to complete the assignment must be your own (you may share ideas and discuss concepts on how to complete the assignment BUT you may NOT copy and paste code with ANYONE in the class!). Assignment instructions will be posted on the Owl website.

Late Policy for Assignments

A late assignment will have 5% deducted from the final grade for each day that the assignment is late up to a maximum of 15% (three days late).

An assignment that is more than three days late will not be accepted.

No extensions will be given for assignments. However, in the event of serious medical or compassionate grounds, a student should take supporting documentation to the academic counselors in the office of the Dean of his/her faculty, who will contact the instructor. Workload, exams, minor illnesses, and home computer problems are NOT valid excuses for being unable to complete an assignment within the allotted time. The lecturer will only accept notices from a student's academic counselling unit from their home faculty if student has a valid reason for handing in an assignment late. THE STUDENT MUST NOT GO TO THE LECTURER with his/her documentation, but instead the student must see the academic counselling unit for his/her home faculty and the counselor will notify the lecturer. Upon notification from the academic counselor, the lecturer will move the weight of the assignment/lab onto the exam or the major assignment.

For more information look here: http://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_illness.pdf

ASSIGNMENT BACKUPS

It is your responsibility to keep up-to-date backups of assignment disk files in case of system crashes or inadvertently erased files. Keep disk copies of all material handed in, as well as the actual graded assignment and the emails you receive after you submit your assignments, to guard against the possibility of lost assignments or errors in recording marks.

ASSIGNMENT MARKING

Assignments will be marked by the TA’s, usually within 1 week of the last possible date to hand in the assignment. Marks and comments will be returned to students via OWL. You are responsible for checking your assignment mark in OWL. YOU HAVE TWO WEEKS TO CHECK YOUR GRADE AFTER IT HAS BEEN POSTED ON OWL. Any requests for mark adjustments after those two weeks will not be granted and the mark will be considered final.

You should direct any questions about the marking of the assignment to your lecturer. NOTE: if you request a remark because you disagree with one portion of the mark, the lecturer will remark the ENTIRE assignment and you may end up with a lower mark that you were given by the TA. initially. If this occurs, the mark given by the lecturer will stand and you will have no recourse to go back to the original mark.

Access to our lab rooms - Middlesex College Room 230

After-hours access to Computer Science lab rooms is by student card. If a student card is lost, you will need to visit the Student Services Building to obtain a replacement. As of 2018, the cost for a replacement card is $25. More information is available at https://registrar.uwo.ca/features/western_onecard/index.html

Students enrolled in Computer Science courses will be granted access to the labs within 7 days of enrollment. If you do not have access to the labs after 7 days, please open a ticket with Science Technology Services at https://helodesk.sci.uwo.ca.
ACADEMIC OFFENCES, ETHICAL CONDUCT AND IMPORTANT LEGALITIES

It is university policy that a regularly scheduled class (lecture, lab, or tutorial) takes precedence over tests and exams. Therefore, if another course schedules a test or exam that takes place during your lab or tutorial, the instructor for that course must accommodate you. No electronic devices (phones, iPods, etc.) may be in your possession during tests and exams, even for timekeeping purposes.

Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at this website: http://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf

Computer-marked, multiple-choice tests and/or exams may be subject to submission for similarity review by software that will check for unusual coincidences in answer patterns that may indicate cheating.

All assignments are individual assignments. You may discuss approaches to problems among yourselves; however, the actual details of the work (assignment coding, answers to concept questions, etc.) must be your individual effort.

Plagiarism: Students must write their essays and assignments in their own words. Whenever students take an idea, or a passage from another author, they must acknowledge their debt both by using quotation marks where appropriate and by proper referencing such as footnotes or citations. Plagiarism is a major academic offence (see Scholastic Offence Policy in the Western Academic Calendar).

Assignments that are judged to be the result of academic dishonesty will, for the student's first offence, be given a mark of zero with an additional penalty equal to the weight of the assignment also being applied. You are responsible for reading and respecting the Computer Science Department’s policy on Scholastic Offences and Rules of Ethical Conduct.

The University of Western Ontario uses software for plagiarism checking such as MOSS. Students will be required to submit their programs in electronic form for plagiarism checking. Students will be required to submit their programs in electronic form for plagiarism checking. Also, references will be requested when downloading images from the Internet for assignments.

ACCOMMODATIONS AND ACCESSIBILITY

In this course, documentation is ALWAYS required if you require an extension for an assignment or if you miss a lab or need accommodations for the final exam. It can only be collected by the student's Dean's Office/Academic Counselling unit.

If you are unable to meet a course requirement due to illness or other serious circumstances, you must seek approval for the absence as soon as possible. Approval can be granted either through a self-reporting of absence or via the Dean's Office/Academic Counselling unit of your Home Faculty. If you are a Science student, the Academic Counselling Office of the Faculty of Science is located in NCB 280, and can be contacted at scibmsac@uwo.ca.

For further information, please consult the university’s policy on academic consideration for student absences: https://www.uwo.ca/univsec/pdf/academic_policies/appeals/Academic_Consideration_for_absences.pdf

If you miss the Final Exam, please contact your faculty's Academic Counselling Office as soon as you are able to do so. They will assess your eligibility to write the Special Exam (the name given by the university to a makeup Final Exam).

You may also be eligible to write the Special Exam if you are in a “Multiple Exam Situation” (see http://www.registrar.uwo.ca/examinations/exam_schedule.html).

ACADEMIC POLICIES

The website for Registrarial Services is http://www.registrar.uwo.ca.
In accordance with policy: https://wts.uwo.ca/identity/identities_and_access/activation.html the centrally administered e-mail account provided to students will be considered the individual's official university e-mail address. It is the responsibility of the account holder to ensure that e-mail received from the University at his/her official university address is attended to in a timely manner.

Exam is closed book/lecture notes. No electronic devices are allowed during the exam.

Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following Web site:

Computer-marked multiple-choice tests and exams may be subject to submission for similarity review by software that will check for unusual coincidences in answer patterns that may indicate cheating.

SUPPORT SERVICES

Please contact the course instructor if you require lecture or printed material in an alternate format or if any other arrangements can make this course more accessible to you. You may also wish to contact Student Accessibility Services (SAS) at 661-2147 if you have any questions regarding accommodations.

The policy on Accommodation for Students with Disabilities can be found here:
https://www.uwo.ca/univsec/pdf/academic_policies/appeals/Academic%20Accommodation_disabilities.pdf

The policy on Accommodation for Religious Holidays can be found here:
http://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_religious.pdf

Learning-skills counselors at the Student Development Centre (http://www.sdc.uwo.ca) are ready to help you improve your learning skills. They offer presentations on strategies for improving time management, multiple-choice exam preparation/writing, textbook reading, and more. Individual support is offered throughout the Fall/Winter terms in the drop-in Learning Help Centre, and year-round through individual counselling.

Students who are in emotional/mental distress should refer to Mental Health@Western (http://www.health.uwo.ca/mental_health) for a complete list of options about how to obtain help.

Additional student-run support services are offered by the USC --> https://westernusc.ca/student-support/

COVID-19 PANDEMIC ISSUES

Although the intent is for this course to be delivered in-person to the extent possible, the changing COVID-19 landscape may necessitate some or all of the course to be delivered online, either synchronously (i.e., at the times indicated in the timetable) or asynchronously (e.g., posted on OWL for students to view at their convenience), as deemed most appropriate by the instructor. The grading scheme will not change. Any assessments affected will be conducted online as determined by the course instructor.

When deemed necessary, tests and examinations in this course will be conducted using a remote proctoring service. By taking this course, you are consenting to the use of this software and acknowledging that you will be required to provide personal information (including some biometric data) and that the session will be recorded. Completion of this course will require you to have a reliable internet connection and a device that meets the technical requirements for this service. More information about this remote proctoring service, including technical requirements, is available on Western's Remote Proctoring website at: https://remoteproctoring.uwo.ca.