CS1046

(Sun Jan 01, 2017 01:00 AM - Thu Jun 01, 2017 01:00 AM)

Western University London, Canada Department of Computer Science

# **COMPUTER SCIENCE 1046b**

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

**Winter 2018** 

**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:**

Section	Lecturer	Meeting Times and Location	Office	Email	Office Hours	Phone Extension
001		,	MC 416	lreid@csd.uwo.ca	Mon 2pm - 3pm Tues 1:30pm-2:30pm Other times available by email appointment	86905

#### **TEXTBOOK**

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

#### **COURSE CONTENT**

Course content can be accessed from OWL found at <a href="http://owl.uwo.ca">http://owl.uwo.ca</a> 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

### 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 ITS (your Western account) and other email providers such as hotmail.com 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

Evaluation Type	Due Date/Description	Overall weight within the course
Self Assessment Quizzes	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 (the 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 Wednesday, January 17, Wednesday, January 31, Wednesday, February 14, Wednesday, March 7 and Wednesday, March 21. You will be given 1 hour to complete the quiz. The quiz will be open from 9pm till 11:55pm on Wednesdays listed.	12%

Group Session Activity Mark	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: Thursday, January 18th, Thursday, February 1, Thursday, February 15, Thursday, March 8 and Thursday, March 22	10 %
Weekly Lab	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 doesnt 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 Wednesday at midnight of that week). Each lab is worth 2%.	20%
Assignment 1 - Using HTML and CSS and JavaScript	Monday, Feb 5 at 11:55pm	5%
Assignment 2 - Using Variables, Ifs and Arrays	Monday, March 12 at 11:55pm	7%
Assignment 3 - Putting it all together	Monday, April 9 at 11:55pm	11%
Final Exam	ТВА	35%

If, for any reason, the instructor can not adhere to the assignment schedule given above, the assignment marks will be pro-rated. **NOTE: To be eligible to pass the course, a student must obtain at least 40% on the final exam.** 

#### **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 counsellor from their home faculty can approve a request for a deferred final exam

Exam is closed book/lecture notes and no electronic devices are allowed.

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.

#### **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 counsellors 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 counsellor will notify the lecturer. Upon notification from the academic counsellor, 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.

## ACADEMIC OFFENCES, ETHICAL CONDUCT AND IMPORTANT LEGALITIES

It is Faculty of Science policy that a student who chooses to write a test or exam deems themselves fit enough to do so, and the student must accept the mark obtained. Claims of medical, physical, or emotional distress after the fact will not be considered. There is no opportunity for a re-weight of the other course components after the test or exam has been written. 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.

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

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. You may NOT copy and paste code from other people. No code (e.g. snippets of code) from outside sources (such as the internet) can be used without explicitly written prior consent from the instructor. 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 (it checks to see how similar one persons code is to another persons code). 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.

## **TUTORING**

The role of tutoring is to help students understand course material. Tutors should not write part or all of an assignment for the students who hire them. Having employed the same tutor as another student is not a legitimate defense against an accusation of collusion, should two students hand in assignments judged similar beyond the possibility of coincidence.

#### ACADEMIC ACCOMMODATION FOR MEDICAL ILLNESS

If you are unable to meet a course requirement due to illness or other serious circumstances, you must provide valid medical or other supporting documentation to your academic counselling unit for your home faculty as soon as possible and contact your instructor immediately. It is the student's responsibility to make alternative arrangements with their instructor once the accommodation has been approved and the instructor has been informed. In the event of a missed final exam, a "Recommendation of Special Examination" form must be obtained from the academic counselling unit for your home faculty immediately. For further information please see: <a href="http://www.uwo.ca/univsec/handbook/appeals/medical.pdf">http://www.uwo.ca/univsec/handbook/appeals/medical.pdf</a>

A student requiring academic accommodation due to illness should use the Student Medical Certificate when visiting an off-campus medical facility or request a Record's Release Form (located in the academic counselling unit for their home faculty) for visits to Student Health Services. The form can be found here: <a href="https://studentservices.uwo.ca/secure/medical\_document.pdf">https://studentservices.uwo.ca/secure/medical\_document.pdf</a>

Students who are in emotional/mental distress should refer to Mental Health@

Western: <a href="http://www.uwo.ca/uwocom/mentalhealth/">http://www.uwo.ca/uwocom/mentalhealth/</a> for a complete list of options about how to obtain help.

#### **CLASSROOM AND COURSE ACCESSIBILITY**

Please contact the course instructor if you require material in an alternate format or if you require any other arrangements to make this course more accessible to you. You may also wish to contact Services for Students with Disabilities (SSD) at 661-2111 x 82147 for any specific question regarding an accommodation. For more information look

here: http://www.uwo.ca/univsec/pdf/academic policies/appeals/accommodation disabilities.pdf

#### STUDENT DEVELOPMENT CENTRE'S LEARNING SKILLS SERVICES

Rm 4100 WSS, <a href="www.sdc.uwo.ca/learning">www.sdc.uwo.ca/learning</a> LS counsellors are ready to help you improve your learning skills. We 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.

#### REGISTRARIAL SERVICES

Additional student-run support services are offered by the USC, <a href="http://westernusc.ca/services">http://westernusc.ca/services</a>. The website for Registrarial Services is <a href="http://www.registrar.uwo.ca.">http://www.registrar.uwo.ca.</a>

## **RELIGIOUS HOLIDAYS**

For more information look here: <a href="http://www.uwo.ca/univsec/pdf/academic\_policies/appeals/accommodation\_religious.pdf">http://www.uwo.ca/univsec/pdf/academic\_policies/appeals/accommodation\_religious.pdf</a>

# **UNIVERSITY STUDENTS' COUNCIL**

For more information about services provided by the Students' Council look here: http://westernusc.ca/services/