



COURSE OUTLINE

SCHOOL OF CONTINUING EDUCATION ARTS AND DESIGN

COURSE NAME: INTRODUCTION TO PROGRAMMING WITH JAVASCRIPT

COURSE CODE: COMP 9629

COURSE HOURS: 21

PREREQUISITES: You are best to have knowledge of HTML. CSS knowledge is not essential

COREQUISITES:


PLAR ELIGIBLE: YES (X) NO ()

EFFECTIVE DATE: 2015/2016

PROFESSOR: Emilio Incerto **OFFICE #:**

PHONE: **EMAIL:** emilio@emilioi.com

NOTE TO STUDENTS: Academic Departments at George Brown College will NOT retain historical copies of Course Outlines. We urge you to retain this Course Outline for your future reference.

FOR OFFICE USE ONLY		
ORIGINATOR: _____	SIGNATURE	DATE
		
CHAIR: _____	SIGNATURE	DATE
		Nov 2015
DATE OF REVISION: _____		

EQUITY STATEMENT: George Brown College values the talents and contributions of its students, staff and community partners and seeks to create a welcoming environment where equity, diversity and safety of all groups are fundamental. Language or activities which are inconsistent with this philosophy violate the College policy on the Prevention of Discrimination and Harassment and will not be tolerated. The commitment and cooperation of all students and staff are required to maintain this environment. Information and assistance are available through your Chair, Student Affairs, the Student Association or the Human Rights Advisor.

George Brown College is dedicated to providing equal access to students with disabilities. If you require academic accommodations visit the Disability Services Office or the Deaf and Hard of Hearing Services Office on your campus.

STUDENT RESPONSIBILITIES: Students should obtain a copy of the *Continuing Education Course Guide* and refer to it for additional information regarding the grading system, withdrawals, exemptions, class assignments, missed tests and exams, supplemental privileges, and academic dishonesty. Students are required to apply themselves diligently to the course of study, and to prepare class and homework assignments as given. Past student performance shows a strong relationship between regular attendance and success.

COURSE DESCRIPTION:

JavaScript is a very powerful, yet easy to learn programming language that will allow web designers and developers to add interactivity, functionality, form validation and more to their static HTML pages. This course introduces computer programming using JavaScript and will provide a foundational knowledge of the subject and get the students comfortable in writing, reading and using JavaScript. This course covers the essential concepts, which are part of most modern programming languages, including: variables, calculations, functions, if statements, loops, arrays, objects and events. The student will be exposed to writing basic code and by the end of the course be able to write programs that interact with various elements of the web page while maintaining good programming style, debugging and best practices.

jQuery is a multi-browser supported JavaScript library that simplifies the use of and access to JavaScript. The most popular websites today use some level of jQuery as it allows for faster deployment and development of JavaScript. It is also the most popular of all the JavaScript libraries out on the web today. Near the end of the course you will be up and running with jQuery in no time.

Knowledge of HTML and CSS is strongly recommended.

COURSE OUTCOMES:

Upon successful completion of this course the students will have reliably demonstrated the ability to:

1. Read and write JavaScript
2. Integrate Javascript into HTML
3. Define objects, properties, methods
4. Employ dot syntax to access properties and methods
5. JavaScript Operators, Variables, Conditional Statements, Loops, etc.
6. JavaScript Objects and OOP basics
7. Validate forms
8. Work with images
9. Handle events
10. Understanding and working with jQuery

DELIVERY METHODS / LEARNING ACTIVITIES:

- Lectures
- Exercises
- Demonstrations
- Hands-on applications

LIST OF TEXTBOOKS AND OTHER TEACHING AIDS:

Recommended: JavaScript: The Definitive Guide: Activate Your Web Pages by David Flanagan (O'Reilly Media)

Additional Materials: USB key with minimum memory of 2MB

TESTING POLICY:

Test and assignment dates are listed below in the course outline. Should you not be in class when daily quizzes are given, you miss out on writing that quiz. It is the responsibility of the student to ensure that s/he understands the evaluation system and various important dates.

Note: The course content follows a sequential instruction / experience path. Progress relies upon the student's exposure to previous instruction and practice. For these reasons, continuous attendance and active class participation will be strongly factored.

ASSIGNMENT POLICY:

1. Objective tests are based on lectures and handouts, and the text (if one is assigned), and serve as a control on other marking that may contain subjective elements.
2. Project / exercise marks are averaged to obtain this portion of the final grade. Late assignments will be penalized at the rate of 5% per day of the assignment mark. You are required to speak to the professor prior to handing in a late assignment. Be prepared to discuss the nature of the delay.
3. A score of zero will be recorded for a missed assignment or quiz unless the student presents the professor with a medical certificate on the first day of return to class and a score of zero will be recorded for an assignment not submitted when due.

EVALUATION SYSTEM:

Assessment Tool:	Description:	Outcome(s) assessed:	Due Date / Week:	% of Final Grade:
Class Participation	Questions and class discussion	-	-	-
Assignments	Exercises to be submitted online	-	Week 2, 4	30%
Test	Performed in class	-	Week 3, 6	30%
Final Project	Covers all material	-	Week 7	40%
			TOTAL:	100%

GRADING SYSTEM

The passing grade for this course is: **50% D**

A+	90-100	4.0	B+	77-79	3.3	C+	67-69	2.3	D+	57-59	1.3	Below 50	F	0.0
A	86-89	4.0	B	73-76	3.0	C	63-66	2.0	D	50-56	1.0			
A-	80-85	3.7	B-	70-72	2.7	C-	60-62	1.7						

Excerpt from the College Policy on Academic Dishonesty:

The *minimal* consequence for submitting a plagiarized, purchased, contracted, or in any manner inappropriately negotiated or falsified assignment, test, essay, project, or any evaluated material will be a grade of zero on that material.

To view George Brown College policies please go to www.georgebrown.ca/policies

LOST DATA:

Students must keep backups of their work; failure to do so may not be used as an excuse for late or missing assignments.

PROFESSOR HANDOUTS:

The professor copies handouts only once. If you miss a class it is your responsibility to assure that alternative arrangements are made during your absence.

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TOPICAL OUTLINE:

Week	Topic / Task	Outcome(s)	Content / Activities	Resources
1	Introducing Programming and Javascript	1,	<ul style="list-style-type: none"> • Getting started with programming • Fundamentals of Javascript • Describe how JavaScript programs are added to HTML file using the <script> element • Statements • Variable naming rules • Variable declaration and data types • Use code comments • Simple Expressions • Create HTML page to test code • Homework / Exercises • Assignment #1 	Online
2	Integrating Javascript into HTML	1, 2	<ul style="list-style-type: none"> • Review the concept of importance of variables in programming • The Document Object Model (DOM) • Explain JavaScript's position within the HTML and CSS framework • Placing Scripts in the Head Section • Use alert() and prompt() • Writing complex expressions • Assignment #1 due 	Online
3	Conditional statements	1, 2, 3	<ul style="list-style-type: none"> • Conditional statements • Boolean variables, comparison operators, and logical expressions • Decision statements and how they change the flow of control • Write syntax of the if and switch statements • Block statements and syntax • Code if statements with simple and compound comparisons • Switch statements • Quiz #1 	Online
4	Functions	1, 2, 3, 4	<ul style="list-style-type: none"> • What is a function? • Importance of functions in programming • Define a function in JavaScript • Function naming conventions • Calling or invoking a function • Modular functions • Function parameters and return values • Variable scope and difference between 	Online

			local and global scope • Assignment #2	
5	Loops and Arrays	1, 2, 3, 4, 5	<ul style="list-style-type: none"> • Coding loops - for loops • Importance of repetition statements to programming • Structure of loop statements • The for loop structure • Coding loops - while loops • Syntax of the while loop • Compare the while and for loops • How to avoid infinite loops • Using Arrays • Definition, properties, and benefits of arrays • Declaring and creating arrays • Storing and retrieving array values • Assignment #2 due • Assign Final Assignment 	Online
6	Objects	1, 2, 3, 4, 5, 6	<ul style="list-style-type: none"> • Quiz 2 • Introduction to DOM manipulation • Events, Forms • Using the Date and Math objects 	Online
7	Project Refinement (Last Minute Problems)	1, 2, 3, 4, 5, 6	Hand in Project (End of class) <ul style="list-style-type: none"> • Introducing jQuery • Working with JavaScript libraries • Why jQuery? • Getting jQuery and adding it to an HTML page • Selecting page elements, adding content to page • Reading, setting and removing HTML content 	Online
<p style="text-align: center;">Please note: this schedule may change as resources and circumstances require.</p> <p style="text-align: center;">For information on withdrawing from this course without academic penalty (ie. a failing grade), please refer to the Continuing Education administrative policies: http://coned.georgebrown.ca/info/administrativepolicies.html#withdrawals</p>				

Information for Students

We hope you find your course at George Brown College to be a challenging and rewarding learning experience. Below you will find some important information to assist you while at the College.

Open Access Computing

Access to the open access computing facilities is restricted to currently registered students, and you will require your student ID number and password in order to log on. **You may be asked to show proof / confirmation of registration, so please carry it with you.** Please check with the lab for hours of operation as they tend to vary depending on the time of year. For more information please visit www.llc.georgebrown.ca/llc or call (416) 415-5000 x2173.

Policy on Missed Tests / Exams

Missing tests or exams is a serious matter. **Students who miss a test will be required to provide a note from their doctor in order to be allowed to write a make-up test / exam.** Students without a written doctor's note may be denied the ability to write the test.

Policy on Plagiarism

The *minimal* consequence for submitting a plagiarized, purchased, contracted, or in any manner inappropriately negotiated or falsified assignment, test, essay, project, or any evaluated material will be a grade of zero on that material. The College may apply the full range of options, **including suspension or expulsion**, according to the procedures outlined under Chapter IX of George Brown's Academic Policies. For a short tutorial on plagiarism, please visit: <http://liad.georgebrown.ca/Library/index.html>

Withdrawal from Class

If you stop attending class without officially withdrawing, you will receive a failing grade that will be reported on your grade report. To withdraw from a course without academic penalty (ie. without receiving a grade of "F"), you must withdraw officially **in writing** to cerereg@georgebrown.ca at the Registration Centre before 60% of the scheduled meetings are held. Be sure to include your name, student ID number and name / start date of course.

In order to receive a partial refund of tuition fees a written request to withdraw must be received by the Registration Centre within 10 days of the first class. Fees will be refunded less a service charge of \$20 and 50% of the material fees. Exceptions to this are noted in the class description in the calendar.

Please allow four to six weeks for processing and delivery of refund cheques.

****NOTE:** You will need to have your student ID and password to log into a number of systems at the College, including Library services and STU-VIEW (the online student information system / your student account). Passwords are emailed to all **new** continuing education students. As soon as you receive your password, you should go to www.service.georgebrown.ca to reset / change it. If you have forgotten your password, you can log into your account to have it reset. If you misplaced your original password before you had a chance to initially change it, please call the Contact Centre at 416.415.2000 to speak to a representative.

Departmental Contacts

If you have any questions or concerns about your class you may contact:

Janet Austin
Administrative Assistant
(416) 415-5000 x2013
cedesign@georgebrown.ca

Antonella Cassar
Coordinator
(416) 415-5000 x2832
acassar@georgebrown.ca

Jonathan Gould
Chair
(416) 415-5000 x2524
jgould@georgebrown.ca

Good luck and enjoy your class!!!