



SCHOOL OF COMPUTER TECHNOLOGY

Full Stack Development I

Credit Hours: 3 Contact Hours: 48 Plar Eligible: ☒ Yes ☐ No
Prerequisites: None Corequisites: None
Effective Date: September 2020

<u>Instructor/s</u>	<u>Email</u>	<u>Phone 416-415-5000 / Room</u>
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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: <u>Albert Danison</u>	SIGNATURE _____	DATE _____
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 Student Handbook 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:

This course is an introduction to web technologies focusing on the View of the Full Stack Development. We will focus on building an interactive client side User Interface using HTML and JavaScript

ESSENTIAL EMPLOYABILITY SKILLS:

As mandated by the Ministry of Training, Colleges and Universities essential employability skills (EES) will be addressed throughout all programs of study. Students will have the opportunity to **learn (L)** specific skills, to **practice (P)** these skills, and/or **be evaluated (E)** on the EES outcomes in a variety of courses. The EES include communication, numeracy, critical thinking & problem solving, information management, interpersonal and personal skills. The faculty for this course has indicated which of the EES are either Learned (**L**), Practiced (**P**) or Evaluated (**E**) in this course:

Skill	L	P	E	Skill	L	P	E
1. communicate clearly, concisely and correctly in the written, spoken and visual form that fulfills the purpose and meets the needs of the audience			X	7. locate, select, organize and document information using appropriate technology and information sources	X	X	X
2. respond to written, spoken or visual messages in a manner that ensures effective communication		X	X	8. show respect for the diverse opinions, values, belief systems, and contributions of others			X
3. execute mathematical operations accurately		X	X	9. interact with others in groups or teams in ways that contribute to effective working relationships and the achievement of goals	X	X	X
4. apply a systematic approach to solve problems	X	X	X	10. manage the use of time and other resources to complete projects	X	X	X
5. use a variety of thinking skills to anticipate and solve problems	X	X	X	11. take responsibility for one's own actions, decisions and consequences		X	X
6. analyze, evaluate, and apply relevant information from a variety of sources	X	X	X				

COURSE OUTCOMES:

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

1 The goal of this course to build a basic User Interface using HTML and JavaScript.

DELIVERY METHODS:

The instructional methods of this course are comprised of a combination of lectures, demonstrations, hands-on exercises and take-home assignments.

LIST OF TEXTBOOKS AND OTHER TEACHING AIDS:

Reference:

1. Murach's JavaScript (2nd Edition) by Mary Delamater. Published (2015). ISBN: 978-1-890774-85-1.

Recommended Resources:

1. <https://developer.mozilla.org/en-US/docs/Web/HTML>
2. <https://developer.mozilla.org/en-US/docs/Web/JavaScript>

TESTING POLICY:

- Students must complete tests and the final exam on the assigned day. If unable to complete the test/exam as scheduled, students are required to notify the professor at least three days prior to the date, so alternative arrangements can be made. Failure to comply with this policy may result in a zero grade.
- Lab tests must be completed based on given instructions and must be completed during the lab hours. ***There will be no partial marks awarded for any of the lab tests if they are not complete.***
- There will be no makeup quiz and lab exercises, for medical or other reasons. If you anticipate missing more than 2 quizzes or lab exercises for serious, major reasons, see your professor beforehand.

ASSIGNMENT POLICY:

- All assignments must be submitted on the due date based on an instruction given by the professor. Late assignment, will be penalized 20% per day to maximum of 5 days, weekend included unless the student has notified the professor (via e-mail,

phone or in person) ahead of the due date that he/she has a valid reason for late submission.

- Students are responsible for making sure their marks are up to date on the blackboard. No mark will change after two weeks from the time marks were posted on Blackboard.

EVALUATION SYSTEM:

Assessment Tool:	Description:	Outcome(s) assessed:	EES assessed:	Date / Week:	% of Final Grade:
Lab Exercises	Exercises on Lecture Topics	1, 2, 3, 4, 5, 6, 7	2,4,5,6, 7,10,11	Refer to topic outline	10
Quizzes	Quiz on Lecture and Lab Topics	1, 2, 3, 4, 5, 6, 7	2,4,5,6, 7,10,11	Refer to topic outline	10
Lab Test	Hands on lab test on JavaScript ES6 and Node.js	1, 2, 3, 4, 5, 6, 7	2,4,5,6, 7,10,11	Week 2, Session 3	25
Project	Individual or team hands-on project (teams of up to two are allowed)	1, 2, 3, 4, 5, 6, 7	1,2,4,5,6,7,8,9, 10,11	Week 3, Session 3	25
Final Exam	Approx 2h multiple choice test			Week 3, Session 3	30
				TOTAL	100%

GRADING SYSTEM the passing grade for this course is: D (50%)

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						

<p align="center">Excerpt from the College Policy on Academic Dishonesty: The <i>minimal</i> 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</p>													
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TOPICAL OUTLINE

Week	Date	Outcome(s)	Content / Activities	Resources
1.1	Tues, Sept 8	1, 4, 6, 7	1. Intro to Full Stack Development <ul style="list-style-type: none"> History of HTML Intro to Web Technologies Full Stack Technologies Development Tools Visual Studio Code IDE Web Browsers 	Blackboard, Developer.mozilla.org

			2. Lab Exercises	
1.2	Thurs, Sept 10	1, 4, 6, 7	1. Introduction to HTML <ul style="list-style-type: none"> • HTML Structure • HTML Elements • HTML and Trees • HTML Documents • HTML Doctypes • HTML Tree Structure • HTML Validators 2. Lab Exercises 3. Quiz	Blackboard, Developer .mozilla.org
1.3	Fri, Sept 11	4, 6, 7	1. HTML Syntax <ul style="list-style-type: none"> • Headers • Button Elements • Input Elements • Constructing Lists • Constructing Links • Adding Images • HTML-Paths 2. Lab Exercises 3. Quiz	Blackboard, Developer .mozilla.org
2.1	Tues, Sept 15	4, 6, 7	1. Introduction to CSS <ul style="list-style-type: none"> • CSS Rulesets • CSS Syntax • Comments • Tag Selectors • Attributes and Selectors • Using Selectors 2. Lab Exercises 3. Quiz	Blackboard, Developer .mozilla.org
2.2	Thurs, Sept 17	4,6,7,9	1. CSS Syntax Fundamentals <ul style="list-style-type: none"> • CSS Units • CSS Colors • Style and Image • Style the Font • Writing Selectors • CSS StyleSheets • Link to StyleSheet 2. Lab Exercises 3. Quiz 4. Project Work Sessions	Blackboard, Developer .mozilla.org

2.3	Fri, Sept 18	4,6,7	1. Intro to JavaScript <ul style="list-style-type: none"> History of JavaScript Browser Debugging Tools JavaScript Console Intro to JavaScript Data Types Numbers Strings Comments String Concatenation Variables 2. Lab Exercises 3. Lab Test	Blackboard, Developer .mozilla.org
3.1	Tues, Sept 22	1, 3, 4, 7	1. JavaScript Conditionals <ul style="list-style-type: none"> If..else statements Else..if statements Logical Operators & Expressions AND OR Statements Truthy & Falsy Ternary Operators Switch Statements 2. Lab Exercises 3. Quiz	Blackboard, Developer .mozilla.org
3.2	Thurs, Sept 24	1, 3, 4, 7	1. JavaScript Functions <ul style="list-style-type: none"> Declaring a Function Multiple Parameters Return Statements Return Values Function Scope Local Scope Global Scope Function Expressions 2. Lab Exercises 3. Quiz 4. Project Working Session	Blackboard, Developer .mozilla.org
3.3	Fri, Sept 25	4, 5, 7	Final Exam Project Due	Blackboard, Developer .mozilla.org
<p>Please note: this schedule may change as resources and circumstances require.</p> <p>For information on withdrawing from this course without academic penalty, please refer to the College Academic Calendar: http://www.georgebrown.ca/Admin/Registr/PSCal.aspx</p>				