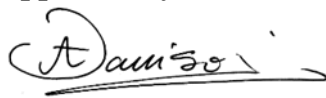


Approved by Chair:



Aug 21, 2022

Signature

COURSE SECTION INFORMATION

Full Stack Development I

Teacher's Name Pritesh Patel

Course Code COMP 3123

Email Pritesh.patel2@georgebrown.ca

Course Section

Phone

Academic Year 2022-2023

Office

Term Fall 2022

Out of Class Assistance

All academic inquiries will be replied to within three business days.

LIST OF TEXTBOOKS AND OTHER TEACHING AIDS:

Required:

1. Pro MERN Stack: Full Stack Web App Development with Mongo, Express, React, and Node 2nd Edition ISBN 978-1-4842-4391-6

The instructional methods of this course are comprised of a combination of lectures, demonstrations, hands-on exercises, and take-home assignments. The chapters of the textbook provide a deep exploration of a different subject. The course will cover only specific sections of the book. The students will have a general overview of the skills and knowledge needed to delve deeper into current subjects or future studies.

Recommended Resources:

1. <https://reactjs.org/>
2. <https://nodejs.org/api/>

Detailed Evaluation System

Assessment	Description	Outcome(s) assessed:	EES assessed:	Week	Weight
Lecture Quiz 8	The best 8 out of 10 quizzes will count.	1-6	1,2,3,4,5	TBA	8%
Lab Test x 2	Hands on test, covers previous weeks topics	2-4	1,2,3,4,5, 6,7,10	5, 13	12%

Lab exercises 8	Weekly 8 out of 10 lab exercises and AtKlass participation	1-6	1,2,3,4,5	TBA	8%
Assignment 1	Individual assignment	1,3,4,5	1,2,3,4,5,6,7,10,11	6	10%
Assignment 2	Individual assignment	1-7	1,2,3,4,5,6,7,10,11	13	12
Mid Term Exam	Mixed format and multiple-choice test.	1,3,4,5	1,2,4	7	20%
Final Exam	Mixed format and multiple-choice test on week 1 to week 14	1-7	2,4,5	15	30%
				TOTAL	100%

Learning Schedule / Topical Outline (subject to change with notification)

TOPICAL OUTLINE:

Week	Topic	Outcome (s)	Content / Activities	Chapter / Reference
1	1		<ul style="list-style-type: none"> - Administrative & Course Outline - Introduction to Full Stack and MERN Stack - Review of JavaScript & ES6 features - Enhanced Object Literals 	Ch 1
2	2	1	<ul style="list-style-type: none"> - Arrow Functions - Classes/Subclasses - Callbacks - Promises - Async/await 	Class notes
3	3	3	<ul style="list-style-type: none"> - Node.js - Introduction & installation - Node package manager (NPM) - Versioning and package.json - Core Node API - Global Object - Modules, Export, Require - Intro to Events and Event Emitter 	Ch 1 https://nodejs.org/api/
4	4	3	<ul style="list-style-type: none"> - Node as a web server <ul style="list-style-type: none"> - Serving static files using http and file system module - ExpressJS framework <ul style="list-style-type: none"> - Introduction to RESTful API - Using Routes (GET) - Working with route params & query string 	https://nodejs.org/api/
5	5	6, 7	<ul style="list-style-type: none"> - ExpressJS framework <ul style="list-style-type: none"> - Using Routes (POST/PUT/DELETE) - Serving static files with express - Express Router 	Ch 3, 5, https://nodejs.org/api/ https://expressjs.com/
6	6	4-5	<ul style="list-style-type: none"> - MongoDB <ul style="list-style-type: none"> - SQL vs No SQL - Local Installation & cloud (MongoDB Atlas) 	Ch 6

			<ul style="list-style-type: none"> - Mongoose - Intro to Mongoose schemas and datatypes - CRUD Operations with Mongoose 	
7	MID-TERM EXAM Mixed format test week 1-6			
8	Intersession Week			
9	7	2	<ul style="list-style-type: none"> - React: <ul style="list-style-type: none"> - Introduction to frontend tools - The architecture of React Application - Setting up React environment - JSX & HTML view - Single Page Application scope and objectives - State - Props 	Ch 1,3 https://reactjs.org
10	8	2	<ul style="list-style-type: none"> - React continued <ul style="list-style-type: none"> - Dev Tools and environment - DOM & Component events - Life Cycle of React Components - Functional vs Class Components 	Ch 4 https://reactjs.org
11	9	2-7	<ul style="list-style-type: none"> - React Router and route parameters - React Forms - Form Element & Validation - Submitting data to the backend using Axios 	Ch 9, 10 https://reactjs.org
12	10	2	<ul style="list-style-type: none"> - Context API 	https://reactjs.org
13	11	2	<ul style="list-style-type: none"> - Introduction to hooks <ul style="list-style-type: none"> - useState, - useEffect - useRef 	https://reactjs.org
14	12	2	<ul style="list-style-type: none"> - Authentication 	Ch 14
15	FINAL EXAM Mixed format test week 1-14			
	Please note: this schedule may change as resources and circumstances require. 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			