Seneca | SCHOOL OF SOFTWARE DESIGN & DATA SCIENCE

Course Code	WEB322	Course Section	NEE	Course Title	Web Programming Tools and Frameworks
Term	Winter 2024 (2241)	Course Outline Link	Course Outline Link	Instructional Mode	FASET FLEX
Scheduled Weekday for Lecture	Tuesday	Scheduled Class Start Time (in Eastern Time)	8:00 AM	Scheduled Class End Time (in Eastern Time)	9:45 AM
Scheduled Weekday for Lab	Thursday	Scheduled Class Start Time (in Eastern Time)	8:00 AM	Scheduled Class End Time (in Eastern Time)	9:45 AM
Professor's Name	Nick Romanidis	Professor's Email Address	nick.romanidis@senecapolytechnic.ca	Professor's Telephone Number	N/A
Scheduled Office Hours	Tuesdays and Thursdays 11:40 AM to 12:30 PM By Appointment Only	Professor's Preferred Method of Communication	MS Teams	Expected Response Time	Following School Day

Assessment Summary

6 Assignments - 50% (A1=5%, A2-A6=9% each)

6 Tests - 50% (10% each, lowest test mark dropped)

The semester starts on Jan 8th, 2024

Week	Class type	Topics/Activities	Instruction Mode	Class Location	Assessment (Type and weight)
Week 1	Lecture	Introduction - Welcome - Developer Tools & Core Technologies - Overview of the Web - HTTP Protocol Overview	Online Synchronous (Attend online at scheduled time)	Newnham B1025	
	Lab	JavaScript Review - Object Oriented JavaScript - Modern Syntax	In-Person (Attend on campus)	Newnham A3527	
Week 2	Lecture	Introduction to Node.JS - Modules & Node Package Manager	Online Synchronous (Attend online at scheduled time)	Newnham B1025	Assignment 1 Released (5%)
	Lab	Web Server Introduction - Simple Web Server using Express.js Routing & Middleware - Application, Request & Response Objects - Middleware	In-Person (Attend on campus)	Newnham A3527	
Week 3	Lecture	Advanced Routing - Query / URL Parameters Handling Asyncronous Code - Callbacks - Promises & Async/Await Back-end Debugging (Node.JS)	Online Synchronous (Attend online at scheduled time)	Newnham B1025	Assignment 2 Released (9%)

	Lab	Front-end Debugging	In-Person (Attend on campus)	Newnham A3527	Test 1 (10%)
Week 4	Lecture	Model View Controllers Template Engines - Introduction - EJS (Embedded JavaScript Templates)	Online Synchronous (Attend online at scheduled time)	Newnham B1025	
	Lab	Interactive Coding / Additional Example(s)	In-Person (Attend on campus)	Newnham A3527	
Week 5	Lecture	UI Toolkits - What is a UI Toolkit / Framework? - Tailwind CSS & daisyUI	Online Synchronous (Attend online at scheduled time)	Newnham B1025	Assignment 3 Released (9%)
	Lab	Web API Overview - JavaScript Object Notation (JSON) - AJAX Review - API Introduction & Implementation	In-Person (Attend on campus)	Newnham A3527	Test 2 (10%)
Week 6	Lecture	Git and GitHub Using DotEnv to secure variables Cyclic	Online Synchronous (Attend online at scheduled time)	Newnham B1025	
	Lab	Optional Student Help / Discussion	In-Person (Attend on campus)	Newnham A3527	
Week 7	Lecture	Working with Forms - HTML Form Elements Review - Processing URL Encoded Form Data	Online Synchronous (Attend online at scheduled time)	Newnham B1025	
	Lab	Optional Student Help / Discussion	In-Person (Attend on campus)	Newnham A3527	Test 3 (10%)
Study week is from Feb 26th to Mar 1st, 2024					
Week 8	Lecture	Relational Database (Postgres) - Introduction to Postgres - Sequelize ORM with Postgres - Operations (CRUD) Reference	Online Synchronous (Attend online at scheduled time)	Newnham B1025	Assignment 4 Released (9%) Assignment 5 Released (9%) Assignment 6 Released (9%)
	Lab	NoSQL Database (MongoDB) - Introduction to MongoDB - Mongoose ODM with MongoDB - Operations (CRUD) Reference	In-Person (Attend on campus)	Newnham A3527	
Week 9	Lecture	Authentication and Authorization - Logging in Users - Password Encryption Managing State Information - Key Terminology - Introduction to "Client Sessions"	Online Synchronous (Attend online at scheduled time)	Newnham B1025	
	Lab	Working with Forms - Processing Multipart Form Data	In-Person (Attend on campus)	Newnham A3527	Test 4 (10%)

Week 10	Lecture	Interactive Coding / Additional Example(s) Optional Student Help / Discussion	Online Synchronous (Attend online at scheduled time)	Newnham B1025	
	Lab	Interactive Coding / Additional Example(s) Optional Student Help / Discussion	In-Person (Attend on campus)	Newnham A3527	
Week 11	Lecture	Approaches to Loading Data - Programmatically loading hard-coded data - Programmatically loading data from various sources	Online Synchronous (Attend online at scheduled time)	Newnham B1025	
	Lab	Optional Student Help / Discussion	In-Person (Attend on campus)	Newnham A3527	Test 5 (10%)
Week 12	Lecture	Security Considerations - HTTPS Introduction - Secure HTTP Headers	Online Synchronous (Attend online at scheduled time)	Newnham B1025	
	Lab	Optional Student Help / Discussion	In-Person (Attend on campus)	Newnham A3527	
Week 13	Lecture	Course Completion and Review	Online Synchronous (Attend online at scheduled time)	Newnham B1025	
	Lab	Optional Student Help / Discussion	In-Person (Attend on campus)	Newnham A3527	Test 6 (10%)
Week 14	Lecture	Optional Student Help / Discussion	Online Synchronous (Attend online at scheduled time)	Newnham B1025	
	Lab	Optional Student Help / Discussion	In-Person (Attend on campus)	Newnham A3527	
The semester ends April 19th,2024					

Other Important Semester Dates

IMPORTANT INFO

Primary addendum approved by:
Kathy Dumanski, Chair, School of Software Design and Data Science

Please read this addendum to the general course outline carefully. It is your guide to the course requirements and activities.

Please refer to the course outline for learning outcomes, course description and text and materials.

Please also visit Welcome | School of Software Design and Data Science (senecacollege.ca) for key information on courses, graduation requirements, transfer credit, and more from the School of Software Design and Data Science.

Course Policies

To obtain a credit in this subject, a student must:

- Achieve an average of 50% or better for all assignments
- Achieve an average of 50% or better for all tests
- Achieve a weighted average of 50% or better on the overall course

A+	90% to 100%
A	80% to 89%
B+	75% to 79%
B	70% to 74%
C+	65% to 69%
C	60% to 64%
D+	55% to 59%
D	50% to 54%
F	0% to 49% (Not a Pass)

Academic Policies

http://www.senecacollege.ca/about/policies/academics-and-student-services.html
For further information, see a copy of the Academic Policy, available online (http://www.senecacollege.ca/about/policies/academics-and-student-services.html) or at Seneca's Registrar's Offices.

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