

# WEB304 - Javascript and AngularJS

Faculty of Continuing Education, Summer - 2019

# **Subject Title**

Javascript and AngularJS

## **Subject Description**

Learn the fundamental concepts of JavaScript that form the foundation for web programming and mobile development. Students learn how to design and deploy sophisticated user interfaces and powerful modern dynamic web pages, jQuery and the Angular JS library

#### **Credit Status**

1 credit towards the Web Programming Recognition of Achievement

# **Learning Outcomes**

Upon successful completion of this subject the student will be able to:

- 1. Create basic scripts and programs using Javascript
- 2. Write Javascript using Typescript
- 3. Understand the basics of MVC frameworks and how to use them
- 4. Learn how to develop using CLI (Command Line Interfaces) with Gitbash
- 5. Understand the basics of modular development
- 6. Create simple single page web applications with Google's new Angular2 framework
- 7. Create applications that can display JSON data on the Angular2 frontend

## **Essential Employability Skills**

Execute mathematical operations accurately. Apply a systematic approach to solve problems.

Locate, select, organize, and document information using appropriate technology and information systems.

## **Academic Integrity**

Seneca upholds a learning community that values academic integrity, honesty, fairness, trust, respect, responsibility and courage. These values enhance Seneca's commitment to deliver high-quality education and teaching excellence, while supporting a positive learning environment. Ensure that you are aware of Seneca's Academic Integrity Policy which can be found at: <a href="http://www.senecacollege.ca/about/policies/academic-integrity-policy.html">http://www.senecacollege.ca/about/policies/academic-integrity-policy.html</a> Review section 2 of the policy for details regarding approaches to supporting integrity. Section 2.3 and Appendix B of the policy describe various sanctions that can be applied, if there is suspected academic misconduct (e.g., contract cheating, cheating, falsification, impersonation or plagiarism).

Please visit the Academic Integrity website http://open2.senecac.on.ca/sites/academic-integrity/for-students to

understand and learn more about how to prepare and submit work so that it supports academic integrity, and to avoid academic misconduct.

#### Discrimination/Harassment

All students and employees have the right to study and work in an environment that is free from discrimination and/or harassment. Language or activities that defeat this objective violate the College Policy on Discrimination/Harassment and shall not be tolerated. Information and assistance are available from the Student Conduct Office at student.conduct@senecacollege.ca.

#### **Accommodation for Students with Disabilities**

The College will provide reasonable accommodation to students with disabilities in order to promote academic success. If you require accommodation, contact the Counselling and Accessibility Services Office at ext. 22900 to initiate the process for documenting, assessing and implementing your individual accommodation needs.

## Prerequisite(s)

WDC100 or previous HTML/CSS experience

# **Topic Outline**

Introduction to the Javascript Language and the basics of scripting languages Troubleshooting errors and use error reporting Basics of CLI (Command Line Interface) using Gitbash Installing and using NodeJS and npm Installing and using Typescript MVC frameworks basics Understand how Angular2 frames MVC within its framework Introduction to JSON data How Angular2 processes JSON data to be displayed on its front end Angular2 modules and components Angular2 services to process data Template HTML / CSS using Angular2 Learn when to use Angular2 for application development Single page applications and the future of the web

# **Mode of Instruction**

Classroom instruction and extensive hands-on experience will be provided with each participant having exclusive use of a computer, reinforced by assigned research and assignments between classes.

#### **Prescribed Texts**

None

## **Reference Material**

None

# **Required Supplies**

None

# **Student Progression and Promotion Policy**

# http://www.senecacollege.ca/about/policies/student-progression-and-promotion-policy.html

Grading Policyhttp://www.senecacollege.ca/about/policies/grading-policy.html

| 90% to 100%            |  |
|------------------------|--|
| 80% to 89%             |  |
| 75% to 79%             |  |
| 70% to 74%             |  |
| 65% to 69%             |  |
| 60% to 64%             |  |
| 55% to 59%             |  |
| 50% to 54%             |  |
| 0% to 49% (Not a Pass) |  |
|                        |  |
| Excellent              |  |
| Satisfactory           |  |
| Unsatisfactory         |  |
|                        |  |

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. (https://www.senecacollege.ca/registrar.html.

# **Modes of Evaluation**

This is a project oriented class. Grading will be based on two assigned, in-class projects.

| Project 1 | 50%  |
|-----------|------|
| Project 2 | 50%  |
| Total     | 100% |

Approved by: Sharon Estok

Last revision date: 18-Mar-2019 9:31:02 AM Last review date: 18-Mar-2019 9:31:59 AM

Seneca College of Applied Arts and Technology