

Course Addendum

Semester: **Winter 2021** Subject Code: WEB422 Section: **A & B**
Subject Title: Web Programming for Apps and Services
Professor: Patrick Crawford
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Office Hours: **Wednesday: 8:55am - 10:40am & Friday: 9:50am - 11:35am**

Created by:

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 sdds.senecacollege.ca for key information on courses, graduation requirements, transfer credit, and more from the School of Software Design and Data Science.

Assessment Summary

- 6 Assignments - 50% ([A1] = 5%, [A2-A6] = 9%/ea)
- 6 Tests - 50% (10%/ea) – **Note: Lowest test mark is dropped**

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

Academic Policies:

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TENTATIVE WEEKLY SCHEDULE (Reflected on the Course Website: <https://web422.ca>)

Semester – Winter 2021

| Week | Topic or Skill | Reading | Assessment | Weight |
|---------------|---|---|---------------------------------|---------------|
| Week 1 | <ul style="list-style-type: none">• Dev environment setup• Re-introduction to back-end web services and testing | Welcome to WEB422 | Assignment 1 Released | 5% |
| Week 2 | <ul style="list-style-type: none">• Short jQuery with Bootstrap 3 Review• Helpful utility functions with Lodash & Rendering Data• Handling Date / Time information using Moment | Bootstrap 3, jQuery and Other Libraries | Assignment 2 Released | 9% |
| Week 3 | <ul style="list-style-type: none">• Introduction to React• Getting started by running the default App• Introduction to React Components | Introduction to Component-based architecture using React | Test 1 (Weeks 1 & 2) | 10% |
| Week 4 | <ul style="list-style-type: none">• Handling Events and Rendering Data• Introduction to Routing• Creating a UI with 3rd party Components | Continue React Development | Assignment 3 Released | 9% |
| Week 5 | <ul style="list-style-type: none">• Processing forms in React• Serving a React App / Hosting on Heroku | React Forms & Deployment | Test 2 (Weeks 3 & 4) | 10% |

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|-------------------|---|--|---------------------------------|------------|
| Week 6 | <ul style="list-style-type: none"> • Introduction to Angular • Getting started by running the default App • Introduction to Angular Components and Templates | Introduction to Angular | Assignment 4 Released | 9% |
| Week 7 | <ul style="list-style-type: none"> • Attribute, Class, Style Bindings & Directives • Emitting Events • Introduction to Routing | Additional Bindings, Directives, Events & Routing | Test 3 (Weeks 5 & 6) | 10% |
| STUDY WEEK | | | | |
| Week 8 | <ul style="list-style-type: none"> • Angular Services Introduction • Working with a Web API in Angular • Angular Routing Continued | Introduction to Services, HttpClient & More Routing Options | Assignment 5 Released | 9% |
| Week 9 | <ul style="list-style-type: none"> • Angular Forms Introduction • Element "State" & Validation | Introduction to Working with Forms in Angular | Test 4 (Weeks 7 & 8) | 10% |
| Week 10 | <ul style="list-style-type: none"> • Introduction to Building / Deploying an Angular app using Node.js • A brief introduction to the Angular testing landscape | Introduction to Angular Deployment & Testing | Assignment 6 Released | 9% |

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|----------------|---|---|---------------------------------------|------------|
| Week 11 | <ul style="list-style-type: none"> • Introduction to JWT • Review User Account Management / Security (MongoDB / bcrypt) • Securing routes in an existing API using Passport.js / Passport-jwt • Updating an Angular app to use JWT (Route Guards / Http Interceptors) | Introduction to Securing an Web API with JWT | Test 5 (Weeks 9 & 10) | 10% |
| Week 12 | <ul style="list-style-type: none"> • Creating a server using Node/Express for managing socket connections • Developing an Angular application which contains a working "chat window" | Introduction to Socket.io | | |
| Week 13 | (Course Review) | | Test 6 (Weeks 11 & 12) | 10% |

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