

MAD9013

Cross-Platform Web Design

Course Outline

2021-2022

Pre-requisite(s)	N/A
Co-requisite(s)	MAD9014
Prepared by	Steve Griffith, Coordinator - Professor
Approved by	Dan Pihlainen, Chair, Media Studies
Normative hours	56.00
Grading system	A+ Through F
Experiential Learning	No

Applicable Program	Level	Core/Elective
1515X01FWO - Mobile App. Des. & Dev	1	Core

COVID-19 Notice

Due to COVID19, this course may be offered via remote delivery in 2021-22 (unless the course is already being delivered fully online). Your course may have changes that are not reflected in the Course Outline. Please see the Course Section Information document for information about your course. If you have questions, please contact your professor.

Course Description

Technologies on the web evolve quickly. Every year brings new devices and with them new capabilities. These devices present many challenges and opportunities to web developers. Students review fundamentals of web development using hypertext markup language (HTML), and cascading style sheets (CSS), with a focus on developing responsive and mobile websites. Multiple IDEs are introduced and used to complete hands-on projects.

Vocational Learning Outcomes

This course provides the opportunity for you to achieve the following outcomes:

1515X01FWO - Mobile App. Des. & Dev

- VLO 3** Create effective user interfaces that leverage evolving mobile device capabilities. (T, A)
- VLO 4** Design and develop websites that deploy to different devices and platforms. (T, A)
- VLO 7** Research and apply various software development kits (SDKs), frameworks and toolkits. (T, A)

Assessment Levels —T: Taught A: Assessed CP: Culminating Performance

Essential Employability Skills

This course contributes to your program by helping you achieve the following Essential Employability Skills:

- EES 7** Analyze, evaluate and apply relevant information from a variety of sources. (T, A)
- EES 11** Take responsibility for one's own actions, decisions and consequences. (T, A)

Course Learning Requirements / Embedded Knowledge and Skills

When you have earned credit for this course, you will have demonstrated the ability to:

1.) Develop content for websites and web apps using modern standard semantic HTML5 elements.

- Explain what open web standards are and what body oversees them
- Create HTML documents using up-to-date standards.
- Validate HTML documents using standards-based tools.
- Create web page content using semantic HTML5 elements for layout, text and images.
- Incorporate meta tags and other non-visual elements into HTML documents to improve SEO and webpage security.
- Use a variety of online sources to determine which HTML features are supported on different platforms.
- Add ARIA attributes to HTML files to meet accessibility standards and better support assistive technologies like screen readers.

2.) Design components and layouts using the latest version of Cascading Style Sheets.

- Create CSS documents using up-to-date standards
- Integrate HTML and CSS to make a cohesive website
- Use a combination of Float, Flexbox and CSS Grid to create layouts and navigation systems for web pages.
- Apply the concepts of Typographic Hierarchy and Vertical Rhythm through CSS, as well as consistent use of valid font stacks.
- Use CSS colours to enhance user experiences, meet accessibility guidelines, and apply added meaning to content.
- Enhance web page interactivity and user experiences through transitions, transforms and animations with modern CSS techniques.
- Use CSS to create Mobile-First Responsive web pages that take advantage of modern browser capabilities to provide accessible and optimized interfaces.

3.) Illustrate good design practices for typography, colour, layout, and navigation that adhere to the latest design standards and best practices for different platforms.

- Describe a variety of modern common design patterns used in websites and web apps.
- Explain the design concepts of Contrast, Repetition, Alignment, and Proximity in reference to web page design.
- Explain how the Gestalt principles of Continuation, Similarity, Figure & Ground, Symmetry, Proximity, and Closure apply to web page design.
- Use Colour Theory to determine which colours would work well together in a colour scheme for a website.
- Explain how Colour Theory and Typography work in harmony with Accessibility Guidelines.
- Explain how a Grid System can help you create a web page layout.

4.) Enlist the use of modern web tools, IDEs, frameworks, and libraries to efficiently create websites.

- Use basic scripts, frameworks, and toolkits to add interactivity to websites, enhance website features, and increase development speed.
- Use a CSS PreProcessor, such as SASS, to efficiently generate optimized, standards-based, valid CSS.
- Utilize and customize the latest version of a modern mobile-friendly web framework, such as MaterializeCSS or Bootstrap, to efficiently create a website.
- Use the features of a modern web IDE, such as VS Code, to build content and components for a standards based website.
- Use GitHub with both private and public repositories to store and manage web projects.
- Use GitHub Gists and Pages as a static hosting solution for web pages and websites.
- Use Git from the Command Line Interface, on its own or in an IDE, to manage a web project.
- Explain how different types of web hosting can be used on a project both locally and remotely.

Learning Resources

- Online written and video tutorials
- Safari e-Books online
- YouTube video tutorials
- BrightSpace LMS
- GitHub hosted course material
- Program Assistants to answer questions during lab time.

Learning Activities

- In class assignments;
- Homework assignments;
- Videos;
- Following tutorials to complete exercises;
- Collaboration to build web assets;
- Brief lectures;
- Study groups with Program Assistants or fellow students;
- Reviews, research;
- Guidance from the course professor as well as program assistants.

Evaluation / Earning Credit

The following list provides evidence of this course's learning achievements and the outcomes they validate:

In-class Work (50%)

Validates Outcomes: CLR 1, CLR 2, CLR 4, EES 7

Assignment(s) (30%)

Validates Outcomes: CLR 1, CLR 2, CLR 3, CLR 4, EES 7, EES 11

Project(s) (20%)

Validates Outcomes: CLR 1, CLR 2, CLR 3, CLR 4, EES 7

Prior Learning Assessment and Recognition

Students who wish to apply for Prior Learning Assessment and Recognition (PLAR) need to demonstrate competency at a post-secondary level in all outlined course learning requirements. Evidence of learning achievement for PLAR candidates includes:

- Portfolio
- Performance Test
- Project/Assignment

Other Information

Grade Scheme

Final Grade	Mark Equivalent	Numeric Value	Final Grade	Mark Equivalent	Numeric Value
A+	90% - 100%	4.0	A	85% - 89%	3.8
A-	80% - 84%	3.6	B+	77% - 79%	3.3
B	73% - 76%	3.0	B-	70% - 72%	2.7
C+	67% - 69%	2.3	C	63% - 66%	2.0
C-	60% - 62%	1.7	D+	57% - 59%	1.4
D	53% - 56%	1.2	D-	50% - 52%	1.0
F	0% - 49%	0	FSP	0	0

Course Related Information

Please refer to the Course website for specific course-related information as provided by your professor.

Program Related Information

1515X01FWO - Mobile App. Des. & Dev

The late policy for assignments is a 10% per day deduction to a maximum of 30%.

If an assignment is still not submitted 10 days after the due date then a grade of zero will be given for the assignment. Students can still submit work for review and feedback after the 10 days but no grade will be given.

Any extensions to due dates must be arranged with the course instructor BEFORE the due date.

Department Related Information

College Related Information

Algonquin College's policies have been developed to ensure the health, safety and security of all students, faculty and staff, and the proper and fair operation of the College as an academic institution and employer. Please refer to the Algonquin College Policies website for the most current policy information available at <http://www.algonquincollege.com/policies/>.

Students are especially encouraged to be aware of the following College expectations

Academic Integrity & Plagiarism

Algonquin College is committed to the highest standards of academic integrity, and students are expected to uphold these standards as part of the learning process. Any academic work submitted by a student is expected to be their own work, unless designated otherwise and all sources must be attributed. All students should be familiar with the Algonquin College policy [AA18: Academic Dishonesty and Discipline](#) as well as [AA20: Plagiarism](#). In some courses, online proctoring may be used to discourage cheating. Additional information can be found at <https://www.algonquincollege.com/student-support-services/student-learning-kit/preparing-to-learn-online/>. Students with any questions about the course expectations for academic dishonesty and plagiarism are encouraged to speak to their professor.

Centre for Accessible Learning

Students with visible and/or non-visible disabilities are encouraged to register with the Centre for Accessible Learning (CAL) in order to be eligible for appropriate learning supports and/or accommodations. Students are strongly encouraged to make an appointment at the Centre for Accessible Learning as early as possible when starting a program. Once your needs are identified, a Letter of Accommodation (LOA) will be issued which you can share with your professors. If you are a returning student, please ensure that professors are given a copy of your LOA each semester.

College Email

Students at Algonquin College are provided with a college email account. This is the address that will be used when the College, your professors, or your fellow students communicate important information about your program or course activities. Your network credentials can be found in the [ACSIS portal](#) and you are expected to check your Algonquin email regularly and to use it to send and receive college-related email. Support is available through the college Information Technology Service (ITS) at: <https://www.algonquincollege.com/its/>

Retroactive Accommodations

Students are expected to meet evaluation and completion deadlines as stated in course outline and course section information documents. In circumstances where evaluation and/or completion deadlines are missed or student performance has been affected by a temporary or permanent disability (including mental health), interim or retroactive accommodations may be considered. In such instances, please consult your course faculty member. For other situations where deferral of evaluations may be warranted, please consult Algonquin College Policy [AA21: Deferred Evaluation](#).

Student Course Feedback

Algonquin College invites students to share their course experience by completing a student course feedback survey for each course they take. For further details consult Algonquin College Policy [AA25: Student Course Feedback](#).

Use of Mobile Devices in Class

With the proliferation of small, personal mobile devices used for communications and data storage, Algonquin College believes there is a need to address their use during classes and examinations. During classes, the use of such devices can be disruptive and disrespectful to others. During examinations, the use of such devices may facilitate cheating. For further details consult Algonquin College [Policy AA32: Use of Mobile Devices in Class](#)

Technology Requirements

As Algonquin College continues to respond to public health guidelines, many courses will be offered through remote delivery. As such,

students will be required to have access to a computer and to the internet. There may also be additional technology-related resources required to participate in a course that are not included in the course materials fee, such as headphones, webcams, specialized software, etc. Details on these requirements can be found in the Course Section Information of the course outline for each course available on Brightspace.

Transfer of Credit

It is the student's responsibility to retain course outlines for possible future use to support applications for transfer of credit to other educational institutions.