

# MAD9013

## Cross-Platform Web Design

### Course Outline

2024-2025

<b>Pre-requisite(s)</b>	N/A
<b>Co-requisite(s)</b>	MAD9014
<b>Prepared by</b>	Steve Griffith
<b>Approved by</b>	Shirley Piersma, Academic Chair, Media Studies
<b>Normative hours</b>	56.00
<b>Grading system</b>	A+ Through F

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

## Land Acknowledgement

*Algonquin College campuses in Ottawa, Perth and Pembroke are located on the traditional unceded, and unsundered territory of the Anishinàbe Algonquin People. The Algonquin People have inhabited and cared for these lands since time immemorial. We take this time to express our gratitude and respect to them and to the land for all that it has provided and will continue to provide.*

*As a post-secondary institution, we acknowledge the harms done to Indigenous Peoples and are committed to learning from the past. We pledge to promote healing and resilience as we move forward in partnership with the Algonquin Nations, First Nations, Métis, and Inuit Peoples in a spirit of reconciliation.*

*While we recognize that territorial acknowledgements are only one step in cultivating greater respect and inclusion of Indigenous Peoples, we commit to accompanying these words with actions. We are dedicated to building a future and community that is better for all.*

*We pledge to continue exploring and making meaningful contributions to the Truth and Reconciliation Commission of Canada's Calls to Action.*

*Learn more about the College's commitment to Truth and Reconciliation: <https://www.algonquincollege.com/tri/>*

## 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

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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)

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

## Course Learning Requirements / Embedded Knowledge and Skills

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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 Flexbox and CSS Grid to create modern 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.
- Utilize and customize the latest version of a modern mobile-friendly web framework, such as Bootstrap, Foundation, or TailwindCSS to efficiently create a website.
- Use the features of a industry-standard web IDE, such as VSCode, 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

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- 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

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- 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.

## Pre-defined Evaluation / Earning Credit

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

### Assignment(s) (50%)

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

### Project(s) (35%)

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

### In-class Work (15%)

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

## Prior Learning Assessment and Recognition

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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

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### 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

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

## Program Information

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### 1515X01FWO - Mobile App. Des. & Dev

#### **Late Assignment Submission penalties.**

Assignments that are submitted after the deadline are subject to a late penalty.

Assignments submitted after the deadline up to 1 day - 10% penalty.

After 1 day up to 2 days - 20% penalty.

After 2 days, up to 3 days - 30% penalty.

After 10 days assignments are given a grade of zero. The assignments can still be submitted for feedback but are worth no marks.

Late penalty percentages are calculated based on the total possible value of the assignment, not the grade for the work.

#### **Class Absences**

Attendance at all classes, both in-person and online, is required.

If students are going to miss a class, they should contact their course instructor beforehand to let them know. This will give the instructor a chance to let the student know what they will miss, what they will need to make up for, and what material they will need to research on their own.

## Department Information

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## College Related Information

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**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**

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 human and technological assisted generated sources must be attributed. All students should be familiar with the Algonquin College policy [AA48: Academic Integrity](#) which outlines student's roles and responsibilities and what represents academic misconduct. Certain testing environments and course assessments may use online proctoring to prevent academic misconduct. Additional information including student resources can be found on the [Academic Integrity Office's web site](#) and via [Academic Integrity - Student Survival Guide - Subject Guides at Algonquin College \(libguides.com\)](#). Students with any questions about the course expectations regarding academic integrity are encouraged to speak to their professor and the College's Academic Integrity Office team at [aio@algonquincollege.com](mailto:aio@algonquincollege.com).

#### **Centre for Accessible Learning (CAL)**

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 with 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 through the [CAL Student Portal](#). If you are a returning student, please ensure that professors are given a copy of your LOA each semester.

### **Test Accommodations for Students Registered with CAL**

Students who require testing accommodations will book their tests/exams through the [CAL Student Portal](#). It is important to note the posted test/exam booking deadlines for the term. Test booking deadlines are communicated through CAL Disabilities Counsellors, CAL Testing Services, and other college wide communication. Additional information on the steps to book accommodated tests/exams with CAL Test Services can be found at [Step-by-Step Overview](#).

### **Retroactive Accommodations**

Students are expected to meet evaluation and completion deadlines as stated in course outline and weekly schedule documents. In circumstances where evaluation deadlines are missed or student performance has been affected by a temporary, significant and/or unanticipated change in functional ability related to disability (including mental health), interim or retroactive accommodations may be considered. For these instances it is advised you reach out to CAL or your professors as soon as possible. For other situations where deferral of evaluations may be warranted, please consult Algonquin College Policy [AA21: Deferred Evaluation](#).

### **Network Credentials and 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. Students are required to maintain the privacy of their AC login credentials. Sharing network credentials poses a security risk and is subject to disciplinary action. Your responsibility to protect your login credentials is governed by the [Information Security Policy IT01](#). Support is available through the college Information Technology Service (ITS) at: <https://www.algonquincollege.com/its/>

### **Mental Health and Wellness Supports**

Canada has launched a national Suicide Helpline at [www.988.ca](http://www.988.ca) and a wide range of mental health and wellness resources for Algonquin students are available at [www.algonquincollege.com/SSS/student-health-wellness](http://www.algonquincollege.com/SSS/student-health-wellness).

### **Student Course Feedback**

Algonquin College's 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 unless authorized by your professor can be disruptive and disrespectful to others. During examinations, the use of such devices is generally prohibited unless authorized by your professor. Otherwise use is considered academic dishonesty in the form of cheating. For further details consult Algonquin College Policy [AA32: Use of Electronic Devices in Class](#)

### **Technology Requirements**

Students are 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 Weekly Schedule document of the course 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.

### **Safe Harbour**

In the event of an unexpected major event (pandemic, etc.), your course may have changes that are not reflected in the Course Outline. Should this happen, the Weekly Schedule document will have updated information about your course.