MAD-3144 Development for Mobile Web

Computer Studies

Course Number:	Co-Requisites:	Pre-Requisites:
MAD-3144	N/A	N/A
Prepared by:	Ylber Ramadani, Course Author	
Approved by:	Chris Slade, Dean, Computer Studies	
Approval Date:	Friday, June 9, 2017	
Approved for Academic Year:	2017-2018	
Normative Hours:	60.00	

Course Description

This hands-on course provides the skills and knowledge necessary to create mobile web applications for today's most popular smart phone devices. This course focuses on working with HTML5, one of the best advancements to hit the web since its inception. CSS and JavaScript are also covered in detail. The course will also focus on the mobile web by covering more complex features, including multimedia and interactive functionality. Students will also learn how to validate HTML form fields, create a JavaScript quiz, build a mobile search page, implement a mobile blogging interface, and create a shopping cart.

Course Learning Outcomes/Course Objectives

1. **Discuss and examine the principles and structure of HTML 5**
   - 1.1 Identify the different mobile environments
   - 1.2 Define HTML5
   - 1.3 Analyze HTML5's syntax
   - 1.4 Write code using HTML5
   - 1.5 Discuss new features in HTML 5
2. **Discuss and examine the principles and structure of CSS**
   - 2.1 Define CSS
   - 2.2 Explain the role of CSS in web development
   - 2.3 Analyze the CSS syntax
   - 2.4 Apply CSS to create websites that meet existing standards
3. **Identify HTML tags and CSS properties and use them to create the simple structure of a web page**
   - 3.1 Incorporate links, lists, and images in a simple web page

3.2 Create websites based on HTML and CSS

3.3 Use Geolocation to detect orientation using CSS Media Queries and JavaScript

3.4 Implement web pages with dynamic web content

3.5 Manipulate web page content with JavaScript and the Document Object Model

3.6 Utilize forms and tables as well as include audio and video to a web page

4. Design and deploy a web site

4.1 Install an FTP Client

4.2 Set up FTP accounts

4.3 Utilize an FTP client to connect and upload/download files to a web site on a remote web server

5. Create advanced mobile-compatible web pages

5.1 Determine effective ways to import style sheets

5.2 Create and apply styles for different media types

5.3 Use jQuery and jQuery Mobile to enhance your web page and build a mobile web site

6. Examine real-world mobile web design approaches and evaluate these approaches

6.1 Examine current state of the art websites

6.2 Assess and evaluate current mobile web standards

6.3 Create responsive mobile-based websites

7. Use effective sales and marketing kills to effectively pitch a mobile web design approach

7.1 Identify the key players in the current mobile market

7.2 Discuss different marketing techniques ranging from utilizing social media to crowd sourcing

7.3 Present the value of mobile applications to potential customers

Learning Resources

Resources and Supplies

Required

- Ruvalcaba, Z., Boehm A., (2015). HTML 5 and CSS 3. Mike Murach & Associates. 978-1-8907-7483-7978

Supplemental

- Firtman, M. (2013). Programming the Mobile Web. O'Reilly Media. 978-1-449-33497-0

Student Evaluation

Assignments - 65%

1 Mid-Term project - Final Project Part I - (Groups, use of Github, use of Scrum as agile methodology) - 25%
1 Final project (20%) with presentation (20%) - Final Project Part II - (Groups, use of Github, use of Scrum as agile methodology) - 40%

Final Exam - 35%

1 Final Exam with a hands-on portion (focus on coding and debugging)

Grade Scheme

The round off mathematical principle will be used. Percentages are converted to letter grades and grade points as follows:

Mark (%)	Grade	Grade Point	Mark (%)	Grade	Grade Point
94-100	A+	4.0	67-69	C+	2.3
87-93	A	3.7	63-66	C	2.0
80-86	A-	3.5	60-62	C-	1.7
77-79	B+	3.2	50-59	D	1.0
73-76	B	3.0	0-49	F	0.0
70-72	B-	2.7			

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 of the course learning requirements outlined above. Evidence of learning achievement for PLAR candidates includes:

- Not Applicable: Students are not eligible for a Prior Learning Assessment.

Course Related Information

This course will consist of interactive lectures, discussion groups, independent assignments, project based learning and tests. Twelve (12) hours per week theory, comprised of interactive lecture and small group activities. Eight (8) hours per week in lab, with demonstrations of principles by the instructor, followed by experiments conducted in small groups, including individual reports of the experiments by each student. Students will also be asked to present their term project findings orally as well as in written format.

The passing grade for this course is a D. (50%)

College Related Information

Academic Integrity

Lambton College is committed to high ethical standards in all academic activities within the College, including research, reporting and learning assessment (e.g. tests, lab reports, essays).
The cornerstone of academic integrity and professional reputation is principled conduct. All scholastic and academic activity must be free of all forms of academic dishonesty, including copying, plagiarism and cheating.

Lambton College will not tolerate any academic dishonesty, a position reflected in Lambton College policy. Students should be familiar with the Students Rights and Responsibilities Policy, located on the MyLambton website. The policy states details concerning academic dishonesty and the penalties for dishonesty and unethical

conduct.

Questions regarding this policy, or requests for additional clarification, should be directed to the Lambton College Centre for Academic Integrity

Students with Disabilities
If you are a student with a disability please identify your needs to the professor and/or the Accessibility Centre so that support services can be arranged for you. You can do this by making an appointment at the Accessibility Centre or by arranging a personal interview with the professor to discuss your needs.

Student Rights and Responsibility Policy
Acceptable behaviour in class is established by the instructor and is expected of all students. Any form of misbehaviour, harassment or violence will not be tolerated. Action will be taken as outlined in Lambton College policy.

Date of Withdrawal without Academic Penalty
Please consult the Academic Regulations and Registrar's published dates.

Waiver of Responsibility
Every attempt has been made to ensure the accuracy of this information as of the date of publication. The content may be modified, without notice, as deemed appropriate by the College.

Students should note policies may differ depending on the location of course offering. Please refer to campus location specific policies:
- Lambton College - Sarnia Campus: https://www.mylambton.ca/Policies/
- Lambton College - Non-Sarnia Study Locations: https://www.mylambton.ca/Lambton_in_GTA/Student_Policies/

Note: 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.