UNIVERSITY OF LONDON

BSc Computer Science

Module Specification

Key Information			
Module title	Web Development		
Level	4	Credit value	15
Member Institution	Goldsmiths	Notional study hours and duration of course	150
Module lead author/ Subject matter expert	Nick Hine		
Module co-author			

Rationale for the module

Web technology is a critical application area for computer science, and an understanding of the internet and web technologies will provide you with the ability to reason about many of the computer systems you interact with on a daily basis. This module provides you with a skill set in web technology and web languages that you can build upon in later, more advanced modules in the programme.

Aims of the module

This module aims to provide you with a foundational web development skill set. You will learn the critical languages of the web: HTML, CSS and Javascript. Using HTML and CSS, you will learn how to markup, layout and style web content. You will learn about the document object model and how you can dynamically manipulate it with JavaScript to create interactive web pages. You will consider accessibility and usability issues, and how you can overcome them. You will learn about website deployment and how you can use it to make your websites accessible to other people. The module will also enable you to present your work online in the form of a website.

Topics covered in this module:

The topics listed here are an approximation of what will be covered. The topics presented may be slightly revised to ensure currency and relevance. Students will be advised of any changes in advance of their study.

- Introduction to Web Development
- Web Site Design
- Essential HTML
- Introduction to CSS
- Positioning in Styling & Design
- Responsive CSS
- Introduction to JavaScript for the Web
- Manipulating the DOM using Javascript
- JavaScript Libraries
- Web Hosting & Professional Practices

Approximately 10-12 hours of study will be required per topic. The remaining study time is intended for coursework.

Learning outcomes for the module

Students who successfully complete this module will be able to:

1. Explain the benefits and limitations of client-side interactivity for web applications
2. Understand web page structure and the Document Object Model
3. Use a text editing tool to create a web application
4. Manipulate the DOM and respond to events using Javascript
5. Apply knowledge of usability and accessibility issues to the design of websites
6. Create an interactive, usable and accessible website using well formed HTML, CSS and Javascript

Assessment strategy, assessment methods

Summative and Formative Assessments
The module will contain a range of summative and formative assessments. Summative assessments are assessments which contribute directly towards your final grade. Formative assessments do not count directly towards your final grade. Instead, they provide you with opportunities for low stakes practice, and will often provide some sort of feedback about your progress. For example, a practice quiz might provide you with feedback about why a particular answer was wrong.

There will be regular quizzes to help you develop your learning and gauge your progress.

Assessment Activities
The table below lists the assessment activity types you might encounter taking the module. It also states if that type of assessment can be automatically graded. For example, multiple choice quizzes can be automatically graded, and so can some programming assignments. It also states if that type of assessment will be found in the summative courseworks. More details about the summative assessments are provided below.

Assessment activity type	**Can it be automatically graded with feedback in some cases?**	**CW1**	**CW2**
Writing task		X	X

Programming task		X	X

Pass Mark

In order to pass this module, you must achieve at least 35% in each element of summative assessment and an overall weighted average of 40%, subject to the application of rules for compensation. Please refer to the programme regulations for more information.

Summative Assessment Elements

This module will primarily be assessed through a substantial website development project.

Summative Assessment Component	Components	Percentage of final credit	Deadline
Coursework 1	Teamwork website assignment and Reflective essay	30%	Mid session
Coursework 2	Individual website assignment	70%	End of session

The assessment for this module comprises two coursework components. The first component comprises a variety of exercises and quizzes which are designed to take a total of 15 hours to complete. The second coursework component is a substantial website development project which is designed to take up to 35 hours to complete.

Learning resources

The module will draw on a number of different, largely web-based, public resources as well as the resources produced as bespoke material for this module. Textbooks with useful material include:

- Jennifer Niederst Robbins, 2013 HTML5 Pocket Reference: Quick, Comprehensive, Indispensable (Pocket Reference (O'Reilly))
- Eric A. Meyer and Estelle Weyl , 2017, CSS: The Definitive Guide: Visual Presentation for the Web
- Cody Lindley, DOM Enlightenment: Exploring JavaScript and the Modern DOM

Some key online references are:

- W3 Schools Online Web Tutorials, http://www.w3schools.com/
- Mozilla Developer Network Tutorials, https://developer.mozilla.org/
- Marijn Haverbeke, 2012 "Eloquent JavaScript: A Modern Introduction to Programming" - free online text http://eloquentjavascript.net