

COMP2110

Web Technology

Session 1, Weekday attendance, North Ryde 2020

Department of Computing

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General Information

Unit convenor and teaching staff

Convener, Lecturer

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Lecturer

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Credit points

10

Prerequisites

(COMP1010 or COMP125) and (COMP1350 or ISYS114)

Corequisites

Co-badged status

Unit description

This unit covers a range of techniques and concepts that are relevant to implementing systems on the world wide web. From web site development using HTML and CSS, through to complete client-server applications, the unit explores the full spectrum of this technology, providing insight into the standards underlying the web and the programming techniques used to exploit these standards to build web applications.

Important Academic Dates

Information about important academic dates including deadlines for withdrawing from units are available at https://www.mq.edu.au/study/calendar-of-dates

Learning Outcomes

On successful completion of this unit, you will be able to:

ULO1: Use your knowledge of the underlying technologies of the web to communicate in detail how web applications work

ULO2: Critique web design and apply good design principles to develop accessible web

applications.

ULO3: Design and develop a data driven web application using modern web technologies.

ULO4: Demonstrate knowledge of ethical and legal issues relating to web applications

ULO5: Use automated and other tests to ensure that implementations match client and accessibility requirements.

Assessment Tasks

Coronavirus (COVID-19) Update

Assessment details are no longer provided here as a result of changes due to the Coronavirus (COVID-19) pandemic.

Students should consult iLearn for revised unit information.

Find out more about the Coronavirus (COVID-19) and potential impacts on staff and students

General Assessment Information

Workshop Hurdle

The workshop is a hurdle requirement, you must get 8 out of the possible 10 marks to pass the hurdle but you will have a total of 12 weeks where you could attend - hence you can miss at most four weeks of workshop tasks.

Late Submission

No extensions will be granted without an approved application for Special Consideration. There will be a deduction of 10% of the total available marks made from the total awarded mark for each 24 hour period or part thereof that the submission is late. For example, 25 hours late in submission for an assignment worth 10 marks – 20% penalty or 2 marks deducted from the total. No submission will be accepted after solutions have been posted.

Delivery and Resources

Coronavirus (COVID-19) Update

Any references to on-campus delivery below may no longer be relevant due to COVID-19. Please check here for updated delivery information: https://ask.mq.edu.au/account/pub/display/unit_status

Classes

COMP2110 is taught mainly through online notes and video presentations with a one hour lecture. Each week a number of video presentations will be made available on iLearn, you should watch these and follow up on the topics covered before the lecture. The lecture will recap some of the video content and provide a forum for discussion of the topics of the week.

You will also have a two hour workshop each week in the computer laboratory. This will be used as a combined tutorial and practical class, with tasks each week to engage you in the topics we are discussing. The workshops give you a chance to talk over any problems with your tutor. There will be a checkpoint task each week for you to complete in the workshop, you must do this in the workshop and show your tutor the result.

Since your tutor will be keeping track of your marks, you should attend the workshop that you enroll in. If you do need to change, make sure your tutor and the tutor in the new class agree.

Required Texts

There is no required text for COMP2110. We have written a set of notes for the unit which will be added to through the semester. You can find them here:

· Practical Web Programming

We will also provide notes, slides and links to other resources each week. It is important that you follow up links provided with the video presentations and in the notes on each topic.

Required Technology

You will be writing server side programs in Python 3.6. We will use Visual Studio Code as the recommended development environment although you are free to use your own favourite editor if you wish. You will be making use of a number of different web browsers (Firefox, Internet Explorer, Chrome, Safari, Opera...) to test web pages. All of this software will run on Windows, Mac or Linux.

Unit Schedule

Coronavirus (COVID-19) Update

The unit schedule/topics and any references to on-campus delivery below may no longer be relevant due to COVID-19. Please consult <u>iLearn</u> for latest details, and check here for updated delivery information: https://ask.mq.edu.au/account/pub/display/unit_status

The schedule below is the planned topic list for the unit but minor changes may be made in response to student feedback or other factors. See the iLearn unit page for the definitive and more detailed week by week breakdown.

Week	Topic	Assessment
1	Core Web Technology	
2	HTML and CSS	
3	Elements of Design	
4	Introducing Javascript	
5	Single Page Web Applications	Web Design
6	Web Servers and Services, Forms	
7	Mobile Web Applications	
8	Cookies and Sessions	
9	Accessibility and Usability	
10	Building Server Side	Web Application
11	Server side security issues	Legal & Ethics Report
12	Security on the Web	
13	Summary	

Policies and Procedures

Macquarie University policies and procedures are accessible from Policy Central (https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-central). Students should be aware of the following policies in particular with regard to Learning and Teaching:

- Academic Appeals Policy
- Academic Integrity Policy
- Academic Progression Policy
- Assessment Policy
- Fitness to Practice Procedure
- Grade Appeal Policy
- Complaint Management Procedure for Students and Members of the Public
- Special Consideration Policy (Note: The Special Consideration Policy is effective from 4

 December 2017 and replaces the Disruption to Studies Policy.)

Students seeking more policy resources can visit the <u>Student Policy Gateway</u> (https://students.m q.edu.au/support/study/student-policy-gateway). It is your one-stop-shop for the key policies you need to know about throughout your undergraduate student journey.

If you would like to see all the policies relevant to Learning and Teaching visit Policy Central (https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-central).

Student Code of Conduct

Macquarie University students have a responsibility to be familiar with the Student Code of Conduct: https://students.mq.edu.au/study/getting-started/student-conduct

Results

Results published on platform other than eStudent, (eg. iLearn, Coursera etc.) or released directly by your Unit Convenor, are not confirmed as they are subject to final approval by the University. Once approved, final results will be sent to your student email address and will be made available in eStudent. For more information visit ask.mq.edu.au or if you are a Global MBA student contact globalmba.support@mq.edu.au

Student Support

Macquarie University provides a range of support services for students. For details, visit http://students.mq.edu.au/support/

Learning Skills

Learning Skills (mq.edu.au/learningskills) provides academic writing resources and study strategies to help you improve your marks and take control of your study.

- Getting help with your assignment
- Workshops
- StudyWise
- Academic Integrity Module

The Library provides online and face to face support to help you find and use relevant information resources.

- Subject and Research Guides
- Ask a Librarian

Student Services and Support

Students with a disability are encouraged to contact the <u>Disability Service</u> who can provide appropriate help with any issues that arise during their studies.

Student Enquiries

For all student enquiries, visit Student Connect at ask.mq.edu.au

If you are a Global MBA student contact globalmba.support@mq.edu.au

IT Help

For help with University computer systems and technology, visit http://www.mq.edu.au/about_us/ offices_and_units/information_technology/help/.

When using the University's IT, you must adhere to the <u>Acceptable Use of IT Resources Policy</u>. The policy applies to all who connect to the MQ network including students.

Changes from Previous Offering

This offering changes emphasis from back-end development using Python to front-end development with Javascript. We still include mention of both but the balance has been flipped. The reason for this is that learning two new languages and environments was too much for one unit. Javascript on the front-end is the most common architecture for modern web applications. Some Python is maintained to allow us to discuss the role of the server side application in web architecture.

New material has been introduced on design, usability and accessibility.

Changes since First Published

Date	Description
12/03/2020	Clarify the hurdle requirement is 8/12 weeks.