INFS 7009 WEB TECHNOLOGIES

Credit Points 10

Legacy Code 300693

Coordinator Zhuhan Jiang (https://directory.westernsydney.edu.au/search/name/Zhuhan Jiang/)

Description This unit covers the technologies required for the construction and maintenance of web pages and web sites. It focuses on the web page and site design, markup languages, client-side technologies such as Cascading Style Sheets and Javascript, as well as server-side technologies such as web servers, database connectivity, and server side scripting. It also includes the use of multi-media, security, access rights, and the exploration of some of the latest technological wonders populated on the Internet. This unit is heavily orientated towards practical experience based on amplifying the theoretical concepts.

School Computer, Data & Math Sciences

Discipline Information Systems, Not Elsewhere Classified.

Student Contribution Band HECS Band 2 10cp

Level Postgraduate Coursework Level 7 subject

Learning Outcomes

On successful completion of this subject, students should be able to:

1. Create individual web sites and demonstrate a working knowledge of HTML, CSS, JavaScript, and simple database interaction
2. Develop and implement prototype server-side and client-side applications, using scripting languages and style sheets
3. Demonstrate the understanding of XHTML, DHTML, XML, AJAX, Web Service, multi-media, and human interaction design principles
4. Adjust the site presentation and performance related to the use of mobile devices
5. Explore the merits and various methods to enable web security, auditing and access control for typical platforms and applications
6. Design and implement prototype web-based information systems for commercial applications
7. Identify and discuss variety of current web technologies, potential issues, and the possible future directions

Subject Content

- Internet and the markup languages: HTML, XHTML, XML and others; HTTP protocol and the client-server model of the web; page and site creation.

- Methods of client interfacing to the web, web page design, current multimedia principles of web page layout and the human interface; Cascading Style Sheets.

- Client-side scripting with JavaScript, making use of client-side scripts, including AJAX or DOM, to enable better user experience and interactivity.

- Common web site security and access control, SSL, encryption, digital certificates, and basic copyright issues.

- Web site organisation, web logging, site statistics, site administration, and content management systems.

- Web servers, and the use of web development libraries or tools.

- Latest trend and features of web technologies.

Assessment

The following table summarises the standard assessment tasks for this subject. Please note this is a guide only. Assessment tasks are regularly updated, where there is a difference your Learning Guide takes precedence.

Item	Length	Percent	Threshold	Individual/Group Task
Quiz	50 minutes	20	Y	Individual
Quiz	90 minutes	20	Y	Individual
Practical	8 hours (5-8 linked webpages, depending on the student's own design)	20	Y	Individual
Applied Project	15 hours (10-15 linked webpages, depending on the student's own site design)	40	N	Group

Prescribed Texts

- No specific textbook is prescribed because of the diversity in Web technologies. Also, a tremendous amount of material is available on the Web itself.

Teaching Periods

Sydney City Campus - Term 1
Sydney City
Day
Subject Contact Mahsa Razavi (https://directory.westernsydney.edu.au/search/name/Mahsa Razavi/)

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=INFS7009_22-SC1_SC_D#subjects)

Spring
Parramatta - Victoria Rd
Day
Subject Contact Zhuhan Jiang (https://directory.westernsydney.edu.au/search/name/Zhuhan Jiang/)

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=INFS7009_22-SPR_PS_D#subjects)

Evening
Subject Contact Zhuhan Jiang (https://directory.westernsydney.edu.au/search/name/Zhuhan Jiang/)

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=INFS7009_22-SPR_PS_E#subjects)

Sydney City Campus - Term 3
Sydney City
Day
Subject Contact Antoinette Cevenini (https://directory.westernsydney.edu.au/search/name/Antoinette Cevenini/)

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=INFS7009_22-SC3_SC_D#subjects)