

SENG1050: Web Technologies

Callaghan and Ourimbah

Semester 2 - 2017



THE UNIVERSITY OF
NEWCASTLE
AUSTRALIA

OVERVIEW

Course Description

This course introduces web technologies and the fundamental concepts of internet architecture and how they support the massive growth and varied uses of the medium. A strong emphasis is placed on practical skills such as using various communication techniques, building web pages, and securing information via encryption. The course is designed to give students a sound understanding of the potential as well as the limitations of web technology. Previous computing experience is helpful but not required.

Contact Hours

Computer Lab

Face to Face On Campus

2 hour(s) per Week for Full Term

Lecture

Face to Face On Campus

2 hour(s) per Week for Full Term

Unit Weighting Workload

10

Students are required to spend on average 120-140 hours of effort (contact and non-contact) including assessments per 10 unit course.

COURSE OUTLINE

www.newcastle.edu.au

CRICOS Provider 00109J

CONTACTS

Course Coordinator

Callaghan

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Teaching Staff

Other teaching staff will be advised on the course Blackboard site.

School Office

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SYLLABUS

Course Content

- Introduction to computer networking
- Past, present and potential future of the Internet
- Client-server computing, Search engines, Internet protocols
- World-wide Web Languages: XHTML, XML, CSS, XSLT and Javascript
- HCI and communication issues relating to Web page design
- Cryptography
- Compression
- Social Aspects of the Internet: privacy, responsibility and legal issues.

Course Learning Outcomes

On successful completion of this course, students will be able to:

1. Sound understanding of basic web technology architectures
2. Familiarization with a variety of aspects of electronic communication.
3. Understanding of syntax and semantics of several Markup languages for use in information communication.
4. Detailed knowledge of the concepts and practical aspects of data encryption and compression in networking environments.

Course Materials

COMPULSORY REQUIREMENTS

In order to pass this course, each student must complete ALL of the following compulsory requirements:

Contact Hour Requirements:

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Course Assessment Requirements:

- Assessment 4 - Formal Examination: Minimum Grade / Mark Requirement - Students must obtain a specified minimum grade / mark in this assessment item to pass the course. Students must obtain 40% in the final exam to pass the course.

Pre-Placement Requirements:

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ASSESSMENTS

This course has 4 assessments. Each assessment is described in more detail in the sections below.

	Assessment Name	Due Date	Involvement	Weighting	Learning Outcomes
1	Mid-semester quiz	Lecture time in week 6	Individual	20%	1, 2
2	Web-based assignment 1	TBA	Individual	15%	3
3	Web-based assignment 2	TBA	Individual	25%	3
4	Final exam*		Individual	40%	1, 2, 3, 4

* This assessment has a compulsory requirement.

Late Submissions

The mark for an assessment item submitted after the designated time on the due date, without an approved extension of time, will be reduced by 10% of the possible maximum mark for that assessment item for each day or part day that the assessment item is late. Note: this applies equally to week and weekend days.

2017 - Retention of Assignment Scripts

In 2018, the University of Newcastle will undergo its 5 yearly accreditation cycle with Engineers Australia. Part of this routine process is the collection of a sample of student assignments over a 1+ year period. The objective is to provide the accrediting panel an indication of educational rigour across all courses. In 2017, we will commence collecting sample assignments from each and every assessment task, across the full spectrum of marks. They will be provided to the panel but not de-identified. If you object to your assignment being retained with your name associated, please indicate this on the submission, and if retained, we will de-identify your paper. All papers will be destroyed at the completion of the accreditation process.

Assessment 1 - Mid-semester quiz

Assessment Type Purpose

Quiz

The purpose and benefit of a quiz is to provide the students with mid-term feedback on student learning. This quiz will highlight areas of concern and may stimulate discussion with tutors and lecturers.

Description

Short answer quiz

Weighting	20%
Length	1 hour
Due Date	Lecture time in week 6
Submission Method	In Class
Assessment Criteria	
Return Method	Not Returned
Feedback Provided	In Person - .

Assessment 2 - Web-based assignment 1

Assessment Type	Project
Purpose	To author an initial web page using HTML and CSS. To create an elementary XML document with accompanying DTD.
Description	Individual assignment
Weighting	15%
Due Date	TBA
Submission Method	Online
Assessment Criteria	
Return Method	Not Returned
Feedback Provided	Online - .

Assessment 3 - Web-based assignment 2

Assessment Type	Project
Purpose	To complete the web site begun in assignment 1 including advanced XML, XSLT and Javascript.
Description	Individual assignment
Weighting	25%
Due Date	TBA
Submission Method	Online
Assessment Criteria	
Return Method	Online
Feedback Provided	Online - .

Assessment 4 - Final exam

Assessment Type	Formal Examination
Purpose	The final formal examination is designed to test the individual student's knowledge of the course material and their ability to describe, analyse and hypothesise from this material.
Description	Formal exam
Weighting	40%
Compulsory Requirements	Minimum Grade / Mark Requirement - Students must obtain a specified minimum grade / mark in this assessment item to pass the course..
Due Date	
Submission Method	Formal Exam
Assessment Criteria	
Return Method	Not Returned
Feedback Provided	
Opportunity to Reattempt	Students WILL be given the opportunity to reattempt this assessment. Students with total mark greater than 50% AND achieving >25% but less than 40% in the final exam will be offered an alternate assessment if and only if all other assessment items have been submitted. Students obtaining <25% will not be offered an alternate assessment, and will fail the course, unless students have submitted Adverse Circumstances in accordance with the Adverse Circumstances Policy.

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ADDITIONAL INFORMATION

Grading Scheme

This course is graded as follows:

Range of Marks	Grade	Description
85-100	High Distinction (HD)	Outstanding standard indicating comprehensive knowledge and understanding of the relevant materials; demonstration of an outstanding level of academic achievement; mastery of skills*; and achievement of all assessment objectives.
75-84	Distinction (D)	Excellent standard indicating a very high level of knowledge and understanding of the relevant materials; demonstration of a very high level of academic ability; sound development of skills*; and achievement of all assessment objectives.
65-74	Credit (C)	Good standard indicating a high level of knowledge and understanding of the relevant materials; demonstration of a high level of academic achievement; reasonable development of skills*; and achievement of all learning outcomes.
50-64	Pass (P)	Satisfactory standard indicating an adequate knowledge and understanding of the relevant materials; demonstration of an adequate level of academic achievement; satisfactory development of skills*; and achievement of all learning outcomes.
0-49	Fail (FF)	Failure to satisfactorily achieve learning outcomes. If all compulsory course components are not completed the mark will be zero. A fail grade may also be awarded following disciplinary action.

*Skills are those identified for the purposes of assessment task(s).

Communication Methods

Communication methods used in this course include:

Course Evaluation

Each year feedback is sought from students and other stakeholders about the courses offered in the University for the purposes of identifying areas of excellence and potential improvement.

Academic Misconduct

All students are required to meet the academic integrity standards of the University. These standards reinforce the importance of integrity and honesty in an academic environment. Academic Integrity policies apply to all students of the University in all modes of study and in all locations. For the Student Academic Integrity policy, refer to <http://www.newcastle.edu.au/policy/000608.html>.

Adverse Circumstances

You are entitled to apply for special consideration because adverse circumstances have had an impact on your performance in an assessment item. This includes applying for an extension of time to complete an assessment item. Prior to applying you must refer to the Adverse Circumstances Affecting Assessment Items Procedure, available at <http://www.newcastle.edu.au/policy/000940.html>. All applications for Adverse Circumstances must be lodged via the online Adverse Circumstances system, along with supporting documentation.

**Important Policy
Information**

The 'HELP for Students' tab in UoNline contains important information that all students should be familiar with, including various systems, policies and procedures.

This course outline was approved by the Head of School. No alteration of this course outline is permitted without Head of School approval. If a change is approved, students will be notified and an amended course outline will be provided in the same manner as the original.

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