

E-Commerce Technical Issues PG – 7107

Unit Outline 2009

Faculty of Information Sciences and Engineering

University of Canberra

*Australian Government Higher Education (CRICOS)
Registered Provider number: #00212K*

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This Unit Outline must be read in conjunction with:

- a) *Studying at the University of Canberra: A Guide to Policies and Procedures*, which sets out University-wide policies and procedures, including information on matters such as plagiarism, grade descriptors, moderation, feedback and deferred exams, and is available at <http://www.canberra.edu.au/student-services>
- b) *Guide to Student Services at the University of Canberra*, and is available at <http://www.canberra.edu.au/student-services>
- c) Any additional information specified in section 6f.

1: General Information

- 1a **Unit title:** E-Commerce Technical Issues PG
- 1b **Unit number:** 7107
- 1c **Semester and year offered:**
Semester 2/2009
- 1d **Credit point value:** 3
- 1e **Unit level:** P
- 1f **Name of Unit Convener and contact details (including telephone and email):**
Lecturer: Kim Le, Tel. 6201-2425, Email: kim.le@canberra.edu.au
- 1g **Administrative contact details (including name, location, telephone and email):**
Faculty of Information Sciences and Engineering, 11B14, Tel 6201-2153 or 6201-2417, Email: ise@canberra.edu.au

2: Academic Content

2a Unit description and learning outcomes:

- **Syllabus**

This unit looks at the technical issues behind electronic and mobile commerce systems. Topics include: CGI scripts and variations; transaction modelling; Java and JavaScript; security, including encryption, certificates and firewalls; payment mechanisms; scalability.

- **Learning outcomes:**

On completion of this unit, students will be able to judge between technical alternatives in the implementation of an electronic commerce system. They will be able to implement small e- and m-commerce systems and be able to design more complex ones.

2b Prerequisites and/or co-requisites:

Web Design and Programming G.

3: Delivery of Unit and Timetable

3a Delivery mode

Delivery mode: The unit is delivered with face-to-face contact including lectures, lab/tutorials and consultation. In addition, some discussions and questions/answers may be presented on the unit Moodle website:

<http://learnonline.canberra.edu.au/course/view.php?id=2880>

Lectures: Lectures with a total of two hours /week

Lab/tutorials: One one-hour session/week

Consultation: One hour/week consultation with pre-arranged appointments (email).

3b Schedule of topics/lectures/tutorials/practicals/field classes by week

Lectures and associated topics are scheduled as shown in the below table. However the lecturer reserves the right to change the schedule depended on the study progress.

Weeks	Topics	Reading (Textbooks)
1	• Introduction to E-Commerce	• Ch. 1
2	• Website Evaluation & Usability Testing	• Ch. 8
3-4	• Planning E-Commerce Website	• Ch. 2, 5 & 7
5-6	• E-Commerce Website Programming	• Sebesta's book
7	• Internet Marketing Techniques	• Ch. 9
8-9	• Semester break	
10	• Client-Server Model in Data Communication	• Ch. 3&4
11	• Web Services	• Ch. 10
12-13	• E-Commerce Security & Payment Systems	• Ch. 13–15
14	• M-commerce	• Ch. 6
15	• Review	

4: Unit Resources

4a Lists of required texts/readings

Textbooks:

- Electronic Commerce: From Vision to Fulfillment / E. M. Awad. (3rd edition or later).
- Programming the World Wide Web 2009 / R.W.Sebesta (5th edition).

References:

- E-Business and e-Commerce Infrastructure: Technologies Supporting the e-Business Initiative / A. Chaudary & J.P.Kuilboer.
- The Complete E-Commerce Book: Design, Build & Maintain a Successful Web-based Business / J. Reynolds.
- E-Business & E-Commerce – How to program / Deitel et al.
- E-Commerce Programming with ASP in 21 Days / S.Walther & J. Levine.
- Introduction to E-Commerce / J. F. Rayport & B. J. Jaworski.
- E-Commerce Basics: Technology Foundations & E-Business Applications / W. S. Davis & J. Benamati.
- Cisco Router Firewall Security / R. A. Deal.
- Cryptography and Network Security: Principles and Practice / W. Stallings.
- Introduction to Cryptography and Network Security / B. A. Forouzan.

4b Materials and equipment

Computing facilities: PC with MS Visual Studio .NET 2008 will be used in the unit. Students need to officially enroll in the unit by the end of Week 1 to make sure that their computing facilities, including lab access, have been set up appropriately.

4c Unit website

Students are required to visit the unit website at UC Moodle LearnOnline <https://learnonline.canberra.edu.au/course/view.php?id=2880> at least twice/week to get updated information about the unit such as lecture notes, software examples, lab/tute activities/questions, etc.

5: Assessment

5a Assessment overview

There are two options for the unit assessment:

- a) Option 1: Assignments 1, 2 & 3, and Final Exam
- b) Option 2: Assignments 1, 2 and 4 (software project) without Final Exam. However only students with marks in both assignments 1&2 equal to 80% or higher can choose Option 2.

A summary of the assessment items is given below:

Assessment Item	Deadline	Weights
Assignment 1: E-Commerce Website Investigation	Friday, Week 4	5%
Assignment 2: E-Commerce Website Implementation	Friday, Week 10	25%
Assignment 3: E-Commerce Security	Friday, Week 14	15%
Assignment 4: Software Project	Friday, Week 15	70%
Final Exam	Exam period	55%

5b Details of each assessment item

- Assignment 1 (5%):
This is an individual assignment. Students are requested to investigate an existing E-commerce website, and then write a report on the structure, the navigation facility and a student's evaluation on the website.
- Assignment 2 (25%)
This is a group assignment. Students are requested to form groups, each composed of three or four students. Each group will implement an E-commerce Website. Students intending to take Option 2 of the unit assessment should choose the topic of their website so that it can be expanded to become a software project.
- Assignment 3 (15%)
This is an individual assignment involving E-commerce security.
- Assignment 4 (70%)
This is a group project for Option 2 assessment. Students are requested to expand their assignment 2 to a project of a complete E-commerce website or an equivalent software application.
- Final exam (55%): Only students choosing Option 1 assessment need to sit for the final exam. The exam paper will cover most materials delivered in the unit and assignments. The exam time is of 2 hours including reading time. The materials permitted to bring into an exam room are an A4 sheet of notes (printed or hand written) on both sides, and a non-programmable calculator. Students who have registered with the University Disability Office will be specially considered for their exam needs.

5c Special assessment requirements

Final result:

To be sure of passing the unit, students must have 50% or higher for the total of weighted marks. Each assignment is assessed on the basis of a written report, and a demonstration / oral presentation session.

Final grades are based on the total T of weighted marks: P ($50\% \leq T < 65\%$), CR ($65\% \leq T < 75\%$), DI ($75\% \leq T < 85\%$), and HD ($\geq 85\%$).

Assignment submission:

- Documentation: Documentation accompanying assignment submissions must be neat and on clean A4 size papers. Requirements for each assignment will be specified in the assignment handout that is made available the first time during lecture time and then at the ISE front desk or on the unit website. The front page of each assignment submission must include students' names and ID numbers, the unit name, the assignment number, and the tutor's name. The front page must also have a declaration specifying that all the works, including documentation, obtained data, software, etc., in the assignment are students' own and sources of references are cited appropriately. A sample cover page for assignment documentation can be downloaded from the unit website.
- Late submission: If students have a good reason for a late submission, e.g. sickness, family problem, etc. the students, or somebody on their behalf, must inform their tutor by email before the deadline to avoid an automatic mark of 0%. A late submission without an automatic 0% mark must be submitted within two weeks after the assignment deadline, except in special cases considered as reasonable by the lecturer. An assignment submitted late will not have marks higher than 50% of the maximum marks for that assignment, except in special cases considered as reasonable by the lecturer.

- **Resubmission:** An assignment submitted in time may be resubmitted, within a period of maximum two weeks after the assignment deadline, if the student wishes to improve their marks. Resubmitted assignments will not have marks higher than 50%.

Resubmission is not allowed to any assignment submitted late. Resubmission for Assignment 4 is also not allowed.

Assignment demonstration:

Students need to demonstrate their assignments during a lab session or other times as specified in assignment handouts.

5d Supplementary assessment

See Supplement Assessment Policy at

https://guard.canberra.edu.au/policy/policy.php?pol_id=2900 (section 7).

5e Text-matching software

Nil

6: Student Responsibility

6a Workload

The amount of time you will need to spend on study in this Unit will depend on a number of factors including your prior knowledge, learning skill level and learning style. Nevertheless, in planning your time commitments you should note that for a 3cp Unit the total notional workload over the fifteen week semester is assumed to be 150 hours or an average of 10 hours per week. These hours include time spent in classes. The total workload for Units of different credit point value should vary proportionally. For example, for a 6cp Unit the total notional workload over a fifteen week semester is assumed to be 300 hours or an average of 20 hours per week.

6b Special needs

Students who need assistance in undertaking the unit because of disability or other circumstances should inform their Unit Convener or the Disabilities Office as soon as possible so the necessary arrangements can be made.

6c Attendance requirements

Students need to demonstrate their assignments during normal lab/tutorial sessions of the due weeks of the assignments. A project group is requested to demonstrate their project on the first working day of Week 16.

6d Required IT skills

See Section 2b.

6e Costs

HECS: Students need to read information from DETYA guidelines or similar materials about HECS.

Assignments submission: All assignments submission must be in A4 papers, program codes must be originally printed.

6f Additional information

Additional information will be informed during lecture times and on the unit website.

7: Student Feedback

All students enrolled in this Unit will have an opportunity to provide anonymous feedback on the Unit at the end of the Semester via the Unit Satisfaction Survey which will be presented to you on OSIS. Your lecturer or tutor may also invite you to provide more detailed feedback on their teaching through an anonymous in-class questionnaire administered through the University's Teaching and Learning Centre (TLC).

8: Authority of this Unit Outline
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Any change to the information contained in Section 2 (Academic content), Section 3 (Delivery of Unit and timetable) and Section 5 (Assessment) of this document, will only be made by the Unit Convener if the written agreement of staff and a majority of students has been obtained; and if written advice of the change is then forwarded to each student enrolled in the Unit at their registered term address. Any individual student who believes him / herself to be disadvantaged by a change is encouraged to discuss the matter with the Unit Convener.