SCIT

School of Computing and Information Technology
Faculty of Engineering & Information Sciences

Head of School Professor Willy Susilo, Student Resource Centre,

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CSIT226 Human Computer Interaction
Subject Outline
Spring Session 2016

Consultation Times:

Subject Coordinator / Lecturer	Dr Mark Freeman
Telephone Number:	4221 3223
Email:	mfreeman@uow.edu.au
Location:	3.112

Dr. Freeman's consultation times during session:

Day	Time
Monday	13:30 - 15:30
Tuesday	13:30 - 15:30

Subject Organisation:

Session:	Spring Session 2016, Wollongong Campus
Credit Points	6
Contact hours per week:	2 hr lecture, 2 hr tutorial
Lecture Times & Location:	http://www.uow.edu.au/student/timetables/index.html
Tutorial Day, Time and Location can be found at:	http://www.uow.edu.au/student/timetables/index.html

Students should check the subject's web site regularly as important information, including details of unavoidable changes in assessment requirements will be posted from time to time via Moodle space http://www.uow.edu.au/student/ . Any information posted to the web site is deemed to have been notified to all students.

Subject Description:

The subject provides students with an understanding of Human Computer Interaction (HCI) principles and practices, and how to apply them in the context of developing usable interactive computer applications and systems. The subject

also emphasises the importance of taking into account contextual, organisational, and social factors in the design of computer systems. Students will be taken through the analysis, design, development, and evaluation of user interfaces. They will acquire hands-on design skills through an interaction design project. The subject will cover topics including user-centred design, the development process, prototyping, usability testing, measuring and evaluating the user experience and accessibility.

Subject Learning Outcomes:

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

1. Identify and describe HCI principles and design issues.
2. Discuss and justify HCI solutions based on design principles.
3. Demonstrate an understanding of the HCI design process.
4. Acquire skills to design and implement user-centred design.
5. Select and use suitable methods of measuring and evaluating the user experience.

Graduate Qualities:

"Graduate Qualities" are the aspirational qualities that students will progressively develop through their learning experiences at UOW. These Graduate Qualities are not achieved in a single subject - their development is an ongoing process across an entire program of study. This subject will contribute to the following Graduate Qualities:

Teamwork

Innovation and design

Informed

Independent learners

Problem solvers

Effective communicators

Responsible

Further information can be found at:

 http://eis.uow.edu.au/future-students/graduate-qualities/index.html

Graduate Qualities Explained:

Graduate Qualities	Covered in	Assessed in
Teamwork	Tutorials 2 -13	Group Project
Innovation and design	Lectures 1 -13 Tutorials 2 -13	Group Project, Individual Quizzes, Exam
Informed	Lectures 1 -13 Tutorials 2 -13	Individual Quizzes, Exam
Independent Learners	Tutorials 2 -13	Individual Quizzes, Exam
Problem Solvers	Lectures 1 -13 Tutorials 2 -13	Group Project, Individual Quizzes, Exam

Effective Communicators	Lectures 1 -13 Tutorials 2 -13	Group Project, Individual Quizzes, Exam
Responsible	Lectures 1 -13 Tutorials 2 -13	Group Project, Individual Quizzes, Exam

Recent Improvements:

 SCIT is committed to ongoing improvements and is constantly monitoring feedback from students and staff.

Attendance Requirements:

It is the responsibility of students to attend all lectures/tutorials/labs/seminars/ practical work for subjects for which you are enrolled. It should be noted that the amount of time spent on each 6 credit point subject should be at least 12 hours per week, which includes lectures/tutorials/labs etc.
Satisfactory attendance is deemed by the University, to be attendance at approximately 80% of the allocated contact hours.

Optional Attendence Statement:

Attendance rolls may be kept for tutorials. If you are present for less than 80% and would have otherwise passed you need to apply for student academic consideration, otherwise a TF (technical fail) grade will be recorded. Students MUST attend their allocated tutorial unless they have the written permission of the subject coordinator.

Method of Presentation:

In order to maximize learning outcomes, it is strongly recommended that students attend all lectures.

Lecture Schedule:

Week	Topic	Reading
1	Introduction to HCI	Chapter 1
2	User-Centred Design	Chapter 2
3	User Interaction	Chapters 3 & 4
4	User Interfaces	Chapters 5 & 6
5	Information Presentation and Navigation	
6	Accessibility and Special Issues in HCI	
7	Interaction Design and Development I: Data Gathering and Analysis	Chapters 7 & 8
8	Interaction Design and Development II: Requirements and Modelling	Chapters 9 & 10
9	Interaction Design and Development III: Prototyping	Chapters 11 & 12
10	No Classes: Public Holiday	
11	Usability Evaluation Methods I	Chapter 13
12	Usability Evaluation Methods II	Chapters 14 & 15
13	Future HCI & Subject Revision	

Subject Materials:

Any readings/references are recommended only and are not intended to be an exhaustive list. Students are encouraged to use the library catalogue and databases to locate additional readings

Books

- Coates, K. & Ellison, A. (2014). *An Introduction to Information Design*. Laurence King Publishing.
- Cooper, A., Reimann, R., Cronin, D. & Noessel, C. (2014). About Face: The Essentials of Interaction Design, 4th Edition, Wiley.
- Dix, A. (2009). *Human-computer Interaction.* Springer.
- *Brain-Computer Interfaces in their Ethical, Social and Cultural Contexts*. Springer.
- Lowgren, J & Stolterman, E. (2007). *Thoughtful Interaction Design.* MIT Press.
- MacKenzie, I.S. (2012). *Human-computer Interaction: An Empirical Research perspective.* Morgan Kaufmann.
- Nielsen, J. (1999). *Designing Web Usability*. New Riders Publishing.
- Norman, D. (2013). *The Design of Everyday Things (Revised and Expanded Edition).* MIT Press.
- Premaratne, P. (2014). *Human Computer Interaction using Hand Gestures*. Singapore: Springer.
- Salvendy, G. (2012). *Handbook of Human Factors and Ergonomics.* Wiley.
- Satzinger, J., Jackson, R. & Burd, S. (2016). *Systems Analysis and Design in a Changing World (7th edition).* Cengage Learning.
- Sutcliffe, A. (2010). *Designing for User Engagement: Aesthetic and Attractive User Interfaces*. Morgan & Claypool Publishers.
- Tidwell, J. (2005). *Designing Interfaces*. O'Reilly.

Web Resources

- ACM SIGCHI http://www.sigchi.org/
- The Encyclopaedia of Human-Computer Interaction, 2nd Ed. http://www.interaction-design.org/books/hci.html
- The Interaction Design Foundation https://www.interaction-design.org/
- The World Wide Web Consortium https://www.w3.org/
- U.S. Department of Health & Human Services http://www.usability.gov
- User Experience Professionals Association https://uxpa.org/

Textbook(s):

Preece, J., Rogers, Y. & Sharp, H. (2015). *Interaction Design: Beyond Human-computer Interaction (4th Edition).* Wiley.

Assessment:

This subject has the following assessment components.

ASSESSMENT ITEMS & FORMAT	% OF FINAL MARK	GROUP/ INDIVIDUAL	DUE DATE	SUBJECT LEARNING OUTCOMES
Individual Quizzes	10% (5%	Individual	Completed on eLearning by Friday	1 - 3

each)			weeks 3 & 9 (at 1700hrs)	
Group Project - Part A - User data gathering - Requirements identification	10%	Group	Friday 16 September (submit to eLearning at 1700hrs)	1 - 5
Group Project - Part B - Prototyping - Development	20%	Group	Friday 14 October (submit to eLearning at 1700hrs)	1 - 5
Group Project - Part C - Presentation	10%	Group	Conducted in Tutorials Weeks 12 & 13	1 - 5
Final Examination	50%	Individual	During University examination period	1 - 5

Notes on Assessment:

Individual Quizzes

- Quizzes will be conducted online and due on Friday at 1700hrs of weeks 3 & 9.
- The quizzes test your knowledge and understanding of the material presented in the subject.

Group project

- In groups of 4-5 students you will be given an open complex information systems problem.
- You will initially need to perform user data gathering, elicitation and analysis [Part A]; then based on feedback develop a system design, prototyping and mock-ups of how users would interact with the system [Part B]. You will then present your solution to the class [Part C].
- Assessment for the project is based on the argument(s) developed and sustained for your system, the quality of the research used to support the system developed, the ability to interpret what you have researched and the fluency of your written report.
- You will be required to review each group members' performance through both self- and peer- assessment). The subject coordinator will use this information to gain an understanding of individual participation and group contribution towards the project. This will also be used in determining individual marks for the group project (members will not necessarily be given the same marks).

Final examination

- The final examination tests your knowledge and understanding of all material presented in this subject.

All assignments are expected to be completed independently. Plagiarism may result in a FAIL grade being recorded for that assignment.

Electronic Submission of Assessment Items:

Unless otherwise notified by the subject coordinator, all written assignments must be submitted electronically.

Assessment General:

- Submission of assessment items via email will not be accepted.
- Students must keep an electronic copy of all work/assignments handed in.

Technical Fail

To be eligible for a Pass in this subject a student must achieve a mark of at least 40% in the Final Exam. Students who fail to achieve this minimum mark & would have otherwise passed may be given a TF (Technical Fail) for this subject.

Supplementary Exams

1. A student whose overall performance results in a TF will only be granted a supplementary assessment task (e.g. a supplementary exam or a supplementary assignment) if approved by the school assessment committee.

2. A student who achieves a mark of 48-49% will normally be eligible for a grade of WS and a supplementary exam organised by the University. In this case, the maximum grade attainable is PS (Pass Supplementary) and a mark of 50%.

3. A student who has successfully applied for academic consideration will receive either:

   a. A WD - Withheld Deferred Exam - and be allowed to sit only a supplementary exam, which will be supervised by the University or

   b. A WH – Withheld – and be allowed to sit a supplementary exam not supervised by the University or complete some other supplementary task

4. If a student is being investigated for misconduct and the investigation cannot be completed before the grades are released the student will receive a grade of WH until a mark is declared.
Calculators will/will not be allowed in the final exam.

Procedure for the return of assessment items:

- All assignments will be returned within 2 weeks of their submission.
- Electronic assessment items will be returned electronically with feedback via eLearning.

Penalties for late submission of assessment items:

Penalties apply to all late work, except if student academic consideration has been granted. Late submissions will

attract a penalty of 25% of the assessment mark. This amount is per day including weekends. Work more than 4 days late will be awarded a mark of zero.

Reasonable Adjustment to Assessment

A student with a disability may be entitled to reasonable adjustment to assessment.

A reasonable adjustment document is a recommendation that needs to be discussed and ratified by subject coordinators. Normal subject assessment requirements can only be adjusted with explicit written permission of the subject coordinator. In particular students cannot assume that a reasonable adjustment document bestows a right to deferred or supplementary exams.

Tutorial/Lab Closure Policy

If for any reason, the number of students in a tutorial or lab falls below a sustainable enrolment level, as determined by the Head of School, tutorials/labs offered for that subject may be collapsed or deleted.

You will have to attend the new tutorials/lab if this closure affects the one you are attending.

We will endeavour to make this decision no later than Week 4 of session.

Exams

Exams will be run in accordance with UOW Exam rules, please refer to changes to exams and grades at:
 http://www.uow.edu.au/student/exams/UOW115867.html

Supplementary Exams

The School does not offer a supplementary exam to a student who has sat a scheduled exam.

Supplementary Exams will be dealt with in accordance with student academic consideration policy
(http://www.uow.edu.au/about/policy/UOW060110.html) 9.2 Timing of Supplementary Exams.

While the School normally grants supplementary exams when the student does not sit the standard exam for an acceptable reason, each case will be assessed on its own merit and there is no guarantee a supplementary exam will be granted. If a supplementary exam is granted, you will normally be notified via SOLS Mail the time and date of this supplementary exam. You must follow the instructions given in the email message.

Please note that if this is your last session and you are granted a supplementary exam, be aware that your results will not be processed in time to meet the graduation deadline.

Student Academic Consideration Policy

The School recognises that it has a responsibility to ensure equity and consistency across its subjects for all students. Sometimes, in exceptional circumstances, students need to apply for student academic consideration in order to complete all assessable work.

The University applies strict criteria to the granting of student academic consideration. Before applying for student academic consideration, students should carefully read the University's policy which can be found at:
 http://www.uow.edu.au/about/policy/UOW058721.html

Plagiarism

When you submit an assessment task, you are declaring the following

1. It is your own work and you did not collaborate with or copy from others.

2. You have read and understand your responsibilities under the University of Wollongong's policy on plagiarism.

3. You have not plagiarised from published work (including the internet). Where you have used the work from others, you have referenced it in the text and provided a reference list at the end to the assignment.

Students must remember that:

- Plagiarism will not be tolerated.
- Students are responsible for submitting original work for assessment, without plagiarising or cheating, abiding by the University's Academic Integrity and Plagiarism Policy as set out in the University Handbook, the University's online Policy Directory and in Faculty handbooks and subject guides. Re-using any of your own work (either in part or in full) which you have submitted previously for assessment is not permitted without appropriate acknowledgement - Plagiarism has led to the expulsion from the University.

Coursework Student Academic Complaints Policy

The School aims to provide a fair, equitable and productive learning environment for all its students. The Coursework Student Academic Complaints Policy (http://www.uow.edu.au/about/policy/UOW058653.html) seeks to support the achievement of this goal by providing a transparent and consistent process for resolving student academic complaints.

Any student who has a complaint over a result should obtain a Faculty of Engineering and Information Sciences Coursework Student Academic Review/Complaint form

(http://www.uow.edu.au/student/complaints/UOW008298.html) from the EIS Central. The student should firstly take the form to the marker/lecturer to discuss the matter and, if the student is still not satisfied, s/he should take the next step as outlined on the form.

Once the complaint has been considered by the Faculty, if the student still feels the situation has not been fully resolved s/he may refer the matter to the Student Ombudsman.

Relevant University Policies, procedures and students services:

For more information students must refer to the Course Handbook, relevant online references or consult the UOW General Course Rules in full http://www.uow.edu.au/about/policy/UOW058680.html which contains a range of policies on educational issues and student matters.

This outline should be read in conjunction with the following:

Code of Practice - Teaching and Assessment: http://www.uow.edu.au/about/policy/UOW058666.html
Code of Practice-Honours: http://www.uow.edu.au/about/policy/UOW058661.html
Key Dates: http://www.uow.edu.au/student/dates/index.html
Course Progress Requirements: http://www.uow.edu.au/student/cp/index.html
Academic Grievance Policy (Coursework and honours students): http://www.uow.edu.au/about/policy/UOW058653.html
Student Charter: www.uow.edu.au/student/charter/
Occupational Health and Safety: http://www.uow.edu.au/about/policy/UOW016894.html
Human Research Ethics Committee: http://www.uow.edu.au/research/ethics/human/index.html
General Enquires: EIS Central Build 4, Ground Floor, Phone: 4221 3491

Faculty of Engineering & Information Sciences current students website: http://eis.uow.edu.au/current-students/
Student Support Services: http://www.uow.edu.au/student/services/index.html   Faculty SEDLO (Student Support & Peer Learning Officer)   Mitz Perez - Build 4 Room 105 Phone 4221 3833 Mon - Wed, mitz-perez@uow.edu.au
Information Technology Services and Policies: http://www.uow.edu.au/its/accounts/index.html
Student Representatives: http://eis.uow.edu.au/current-students/get-involved/studentreps/index.html
Academic Integrity and Plagiarism Policy: http://www.uow.edu.au/about/policy/UOW058648.html
Student Academic Consideration Policy: http://www.uow.edu.au/about/policy/UOW058721.html
Rules for student conduct: http://www.uow.edu.au/about/policy/UOW058723.html
Code of Practice - Research: http://www.uow.edu.au/about/policy/UOW058663.html
Code of Practice– Student Professional Experience: http://www.uow.edu.au/about/policy/UOW058662
IP Student Assignment of Intellectual Property Policy: http://www.uow.edu.au/about/policy/UOW058690.html
Research Misconduct Policy: http://www.uow.edu.au/about/policy/UOW058715.html
Non-Discriminatory Language Practice and   Presentation: http://www.uow.edu.au/student/honours/rules/cops/UOW140611.html
Ownership of Work & Intellectual Property Policy: http://www.uow.edu.au/handbook/generalcourserules/UOW028651.html
Netiquette Guide: http://www.uow.edu.au/student/elearning/netiquette/index.html
Library Services: http://www.library.uow.edu.au Bulding 16, Phone: 4221 3548   Complete Start Smart: http://www.uow.edu.au/student/services/fye/resources/startsmart/
Subject Outlines: https://ssl.informatics.uow.edu.au/subjectoutlines/Current/