FIT3063
Human-computer interaction

Unit Guide

Semester 2, 2010

The information contained in this unit guide is correct at time of publication. The University has the right to change any of the elements contained in this document at any time.

Last updated: 14 Jul 2010
FIT3063 Human-computer interaction - Semester 2, 2010

Chief Examiner:
None provided

Lecturer(s) / Leader(s):

Caulfield

Dr Judithe Sheard
Senior Lecturer
Phone: +61 3 990 32701
Fax: +61 3 990 31077

Contact hours: To be advised

South Africa

Ms Stella Ouma

Contact hours: To be advised

Malaysia

Ms Mylini Munusamy

Contact hours: To be advised
Introduction

Welcome to FIT3063, Human Computer Interaction for semester 2, 2010. This 6 point unit is offered to all undergraduate degree programs in the Faculty of IT. This unit provides a detailed understanding of the underpinning theories, principles and practices of interface design for computer-based systems and how these are applied in practice.

Unit synopsis

This unit provides a detailed understanding of the underpinning theories, principles and practices of interface design for computer-based systems. It examines issues in the design of system interfaces from a number of perspectives: user, programmer, designer. It explores the application of the relevant theories in practice. The unit will cover topics such as methods and tools for developing effective user interfaces, evaluation methods such as the conduct of usability and heuristic evaluations, design of appropriate interface elements including the design of menus and other interaction styles. The unit will also focus on designing for a diverse range of users and environments.

Learning outcomes

At the completion of this unit students will have -

A knowledge and understanding of:

- the underpinning theories relevant to HCI;
- the principles and practices of HCI in designing user interfaces;
- the importance and role of usability and evaluation in systems design;
- the issues relating to user diversity, different types of systems, interaction styles, devices and environments.

Developed attitudes that enable them to:

- appreciate the development of systems from a user perspective;
- differentiate between good HCI practice in systems development from other development practices;
- formulate attitudes which enable them to interact effectively with users;
- empathise with all users particularly those with specific needs.

Gained practical skills to:

- recognise the principles of HCI design required in systems development;
- gather user requirements effectively;
- design an effective user interface;
- conduct appropriate evaluation of systems from a HCI perspective and interpret the outcome.

Demonstrated the communication skills necessary to:

- work in teams to complete assessment tasks;
- empathise with users particularly those with some form of disability.
Contact hours

2 hrs lectures/wk, 2 hrs laboratories/wk

Workload

For on campus students, workload commitments are:

* two-hour lecture and
* two-hour laboratory
* a minimum of 2-3 hours of personal study per one hour of contact time in order to satisfy the reading and assignment expectations.

You will need to allocate up to 5 hours per week in some weeks, for use of a computer, including time for newsgroups/discussion groups.

Unit relationships

Prerequisites

One of FIT2001, FIT2027, IMS2805, CSE2200 or equivalent

Prohibitions

CSE3030, FIT2016, FIT3033, GCO3814, IMS2403, IMS3470, MMS2403
Teaching and learning method

Teaching approach

Knowledge and understanding objectives are achieved mainly through lectures and tutorial exercises. The attitudes and beliefs, practical skills, and relationships, communications and teamwork objectives are achieved mainly through laboratory exercises and assignment work.

Timetable information

For information on timetabling for on-campus classes please refer to MUTTS, http://mutts.monash.edu.au/MUTTS/

Tutorial allocation

On-campus students should register for tutorials/laboratories using the Allocate+ system: http://allocate.its.monash.edu.au/

Unit Schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Date*</th>
<th>Topic</th>
<th>Key dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>19/07/10</td>
<td>Introduction</td>
<td>Note: Lecture outline and due dates for assessment tasks may be subject to change as semester progresses</td>
</tr>
<tr>
<td>2</td>
<td>26/07/10</td>
<td>Evolution of HCI</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>02/08/10</td>
<td>Theoretical foundations of HCI</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>09/08/10</td>
<td>Interface design principles</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>16/08/10</td>
<td>Interface design elements</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>23/08/10</td>
<td>Interface design: methods</td>
<td>Class test</td>
</tr>
<tr>
<td>7</td>
<td>30/08/10</td>
<td>Interface design: data gathering and task analysis</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>06/09/10</td>
<td>Interaction styles</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>13/09/10</td>
<td>Usability</td>
<td>Submission of stage 1 of assignment</td>
</tr>
<tr>
<td>10</td>
<td>20/09/10</td>
<td>Interaction devices</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mid semester break</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>04/10/10</td>
<td>Accessibility</td>
<td>Submission of stage 2 of assignment, presentations of assignment work.</td>
</tr>
<tr>
<td>12</td>
<td>11/10/10</td>
<td>HCI in the future</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Summary and review</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>-------------------</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>18/10/10</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Please note that these dates may only apply to Australian campuses of Monash University. Off-shore students need to check the dates with their unit leader.*
Unit Resources

Prescribed text(s) and readings


The text book is available from the Monash University Book Shops. Availability from other suppliers cannot be assured. The Bookshop orders texts in specifically for this unit. You are advised to purchase your text book early.

Recommended text(s) and readings


Equipment and consumables required or provided

Students studying off-campus are required to have the minimum system configuration specified by the Faculty as a condition of accepting admission, and regular Internet access. On-campus students, and those studying at supported study locations may use the facilities available in the computing labs. Information about computer use for students is available from the ITS Student Resource Guide in the Monash University Handbook. You will need to allocate up to 5 hours per week for use of a computer, including time for newsgroups/discussion groups.

Study resources

Study resources we will provide for your study are:

- Weekly detailed lecture notes outlining the learning objectives, discussion of the content and required readings;
- Weekly tutorial or laboratory tasks and exercises;
- Quizzes for revision of topics;
- Assignment specifications;
- This Unit Guide outlining the administrative information for the unit;
- The unit web site on this unit’s Moodle site, where resources outlined above will be made available.
Assessment

Overview

Examination (3 hours): 60%; In-semester assessment: 40%

Faculty assessment policy

To pass a unit which includes an examination as part of the assessment a student must obtain:

- 40% or more in the unit's examination, and
- 40% or more in the unit's total non-examination assessment, and
- an overall unit mark of 50% or more.

If a student does not achieve 40% or more in the unit examination or the unit non-examination total assessment, and the total mark for the unit is greater than 50% then a mark of no greater than 49-N will be recorded for the unit.

Assignment tasks

Assignment coversheets

Assignment coversheets are available via "Student Forms" on the Faculty website: http://www.infotech.monash.edu.au/resources/student/forms/

You MUST submit a completed coversheet with all assignments, ensuring that the plagiarism declaration section is signed.

Assignment submission and return procedures, and assessment criteria will be specified with each assignment.

Assignment submission and preparation requirements will be detailed in each assignment specification. Submission must be made by the due date otherwise penalties will be enforced. You must negotiate any extensions formally with your campus unit leader via the in-semester special consideration process: http://www.infotech.monash.edu.au/resources/student/equity/special-consideration.html.

- Assignment task 1

  Title: Online discussion forums

  Description: Students are required to participate throughout the semester in online discussion forums that will be available through unit's Moodle site

  Weighting: 5%

  Criteria for assessment: Active participation, evidence of wider reading and critical thinking.

  Number of postings, replies to postings, and spread of postings on discussion forums throughout the semester.

  Due date: Ongoing throughout semester
• Assignment task 2

Title: Class test
Description: Students will be required to complete a practical exercise in one tutorial class which will require them to demonstrate their knowledge and skills in relation to concepts presented to that stage of the semester
Weighting: 5%
Criteria for assessment: Satisfactory completion of the exercise.
Due date: Week 6. Details to be advised

• Assignment task 3

Title: Assignment 2
Description: Students will be required to form groups to design and develop a high level prototype of an application (stage 1) and then evaluate a prototype developed by another group (stage 2).

Students will present their work in during their tutorial in week 12.

In these tasks students will demonstrate their knowledge, skills and understanding of the principles and theories covered through the semester.
Weighting: 30%
Criteria for assessment: 20% for the design of the application and report of the process (Stage 1).

10% for the evaluation and report (Stage 2).
Due date: Stage 1 due in week 10 and Stage 2 due in week 12. Details to be advised.
Remarks: Groups will be finalised by Week 6 of semester and all group members must belong to the same tutorial. Forming groups across tutorials will not be allowed.

Examination

Weighting: 60%
Length: 3 hours
Type (open/closed book): Closed book
Electronic devices allowed in the exam: None
See Appendix for End of semester special consideration / deferred exams process.

Due dates and extensions

Please make every effort to submit work by the due dates. It is your responsibility to structure your study program around assignment deadlines, family, work and other commitments. Factors such as normal work pressures, vacations, etc. are not regarded as appropriate reasons for granting extensions. Students are advised to NOT assume that granting of an extension is a matter of course.

Students requesting an extension for any assessment during semester (eg. Assignments, tests or presentations) are required to submit a Special Consideration application form (in-semester exam/assessment task), along with original copies of supporting documentation, directly to their lecturer within two working days before the assessment submission deadline. Lecturers will provide specific outcomes directly to students via email within 2 working days. The lecturer reserves the right to refuse late applications.

A copy of the email or other written communication of an extension must be attached to the assignment submission.

Refer to the Faculty Special consideration webpage or further details and to access application forms: http://www.infotech.monash.edu.au/resources/student/equity/special-consideration.html

Late assignment

Assignments received after the due date will be subject to a penalty of 10% per day. Assignments received later than one week after the due date will not normally be accepted. This policy is strict because comments and guidance will be given on assignments as they are returned. Note also that the first stage of the assignment must be submitted on the due date to be ready to be distributed to another group for evaluation.

Return dates

Students can expect assignments to be returned within two weeks of the submission date or after receipt, whichever is later.

Feedback

Types of feedback you can expect to receive in this unit are:

Informal feedback on progress in labs/tutes

Graded assignments with comments

Test results and feedback

Quiz results
Appendix

Please visit the following URL: http://www.infotech.monash.edu.au/units/appendix.html for further information about:

- Continuous improvement
- Unit evaluations
- Communication, participation and feedback
- Library access
- Monash University Studies Online (MUSO)
- Plagiarism, cheating and collusion
- Register of counselling about plagiarism
- Non-discriminatory language
- Students with disability
- End of semester special consideration / deferred exams