FIT2016 Human computer interaction for multimedia - Semester 2, 2008

Unit leader:
Michael Morgan

Lecturer(s):
Berwick
  • Michael Morgan

Tutors(s):
Berwick
  • Cheryl Howard
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Introduction

Welcome to FIT2016 Human Computer Interaction for Multimedia for semester 2, 2007. This 6 point unit is part of the Multimedia Applications major of the Bachelor of Information Technology and Systems degree. The unit has been designed to provide you with an understanding of the principles of human computer interaction and interface design. It will also allow you to research current issues in these fields. It explores many aspects of HCI with emphasis on the relationship between theoretical knowledge and its practical application.

Unit synopsis

This unit will provide a detailed understanding of the principles and practices involved in the creation and implementation of user-centred interaction with multimedia products and systems in business, entertainment, education and social environments. Focus will be on the development of multimedia that enhances the efficiency, safety, functionality, usability and the aesthetic appeal of the user experience with multimedia at the interface between the user and the technology - that is the development of technologies and tools, which aid the human mind (cognitive artifacts). This unit will explore both technologically determinist arguments and the socially deterministic ways in which technology might conform to human use and abilities.

Topics to be covered include: cognitive psychology, ergonomics, health and safety issues relating to interaction, interface design and implementation, evaluation and testing, affective aspects of technology, social implications of Human-Multimedia (Computer) interaction.

Learning outcomes

At the completion of this unit students will have a theoretical and conceptual understanding of:

- The concepts of cognitive science and the physiology of human perception and the importance of these disciplines to interface design for multimedia systems and products;
- Understand the importance of psychological characteristics and capabilities of the user in the design and implementation of multimedia interfaces;
- The principles of user-centred interface design and the ways in which they might be implemented.

Students will have developed attitudes that enable them to:

- Appreciate importance of the role of the interface designer/developer as the mediator between the multimedia product and the user;
- Appreciate the importance of ergonomic, health and safety issues in the development of user-centric multimedia interfaces.

Students will have the skills to:

- Integrate existing technological skills acquired from FIT1012 and FIT2012 to construct multimedia products and systems using principles of user-centred interface design;
- Design, create and implement interfaces appropriate to both content and context;
- Identify and evaluate the cognitive, physical and social contexts in which the user will interact with a multimedia product or system;
- Evaluate existing interfaces in relation to user-centric principles.

and students will have developed the teamwork skills needed to:

- Design with an understanding of the effects of their own cultural/social background and preconceptions;
- Evaluate their own and others’ interface design and implementation in relation to user-centric principles;
Enable them to design, create and implement interface systems appropriate for use by individuals from diverse educational, social and cultural backgrounds and diverse cognitive styles.

**Workload**

Students will attend a 2 hour lecture and a 2 hour tutorial each week. In addition students be required to complete approximately 8 hours of self-directed learning, such as working on research assignments, completing practical assignments and revision or the exam.

**Unit relationships**

**Prerequisites**

Before attempting this unit you must have satisfactorily completed FIT2012 Digital Media Authoring or equivalent. You should have knowledge of and reasonable skill in digital media manipulation software such as Photoshop and or Illustrator and digital media authoring software such as Director and or Flash.

**Relationships**

FIT2016 is a core unit in the multimedia of the major of the Bachelor of Information Technology and Systems degree.

Before attempting this unit you must have satisfactorily completed FIT2012 Digital Media Authoring or equivalent. You may not study this unit and MMS9008, MMS2403 in your degree.
Continuous improvement

Monash is committed to ‘Excellence in education’ and strives for the highest possible quality in teaching and learning. To monitor how successful we are in providing quality teaching and learning Monash regularly seeks feedback from students, employers and staff. Two of the formal ways that you are invited to provide feedback are through Unit Evaluations and through Monquest Teaching Evaluations.

One of the key formal ways students have to provide feedback is through Unit Evaluation Surveys. It is Monash policy for every unit offered to be evaluated each year. Students are strongly encouraged to complete the surveys as they are an important avenue for students to "have their say". The feedback is anonymous and provides the Faculty with evidence of aspects that students are satisfied and areas for improvement.

Student Evaluations

The Faculty of IT administers the Unit Evaluation surveys online through the my.monash portal, although for some smaller classes there may be alternative evaluations conducted in class.

If you wish to view how previous students rated this unit, please go to http://www.monash.edu.au/unit-evaluation-reports/

Over the past few years the Faculty of Information Technology has made a number of improvements to its courses as a result of unit evaluation feedback. Some of these include systematic analysis and planning of unit improvements, and consistent assignment return guidelines.

Monquest Teaching Evaluation surveys may be used by some of your academic staff this semester. They are administered by the Centre for Higher Education Quality (CHEQ) and may be completed in class with a facilitator or on-line through the my.monash portal. The data provided to lecturers is completely anonymous. Monquest surveys provide academic staff with evidence of the effectiveness of their teaching and identify areas for improvement. Individual Monquest reports are confidential, however, you can see the summary results of Monquest evaluations for 2006 at http://www.adm.monash.edu.au/cheq/evaluations/monquest/profiles/index.html

Improvements to this unit

This unit has been extensively redesigned in order to allow students to research current topics in human computer interaction and interface design.

These changes mean that student research groups will investigate a cutting edge topic in HCI to present a seminar on the topic in weeks 5 to 11.

Students will participate in peer assessment and a worksheet for each of the seminar presentations.

The essay component of the assessment will be replaced by an assignment to create a vodcast of another groups seminar presentation.

A 30 minute lecturer delivered component will be included in weeks 5 to 11 before the student delivered seminars.

The practical work in this unit has been revised to simplify the requirements of the HCI Interface Portfolio.

Students will complete exercises in tutorials each week in order to construct interface design examples for their portfolio.
Unit staff - contact details

**Unit leader**

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Fax +61 3 8622 8999

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**Tutor(s) :**

**Ms Cheryl Howard**  
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Phone +61 3 990 47158
Teaching and learning method

Students will attend a 2 hour lecture and a 2 hour tutorial each week.

In weeks 5 to 11 lectures will consist of student group delivered seminars.

A 30 minute lecturer delivered presentation will also be included in weeks 5 to 11.

In addition students be required to complete approximately 8 hours of self-directed learning, such as working on research assignments, completing practical assignments and revision or the exam.

Communication, participation and feedback

Monash aims to provide a learning environment in which students receive a range of ongoing feedback throughout their studies. You will receive feedback on your work and progress in this unit. This may take the form of group feedback, individual feedback, peer feedback, self-comparison, verbal and written feedback, discussions (on line and in class) as well as more formal feedback related to assignment marks and grades. You are encouraged to draw on a variety of feedback to enhance your learning.

It is essential that you take action immediately if you realise that you have a problem that is affecting your study. Semesters are short, so we can help you best if you let us know as soon as problems arise. Regardless of whether the problem is related directly to your progress in the unit, if it is likely to interfere with your progress you should discuss it with your lecturer or a Community Service counsellor as soon as possible.

Unit Schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Key dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction, Assessment, HCI Research and Seminar Topics</td>
<td>Seminar Topic and Vodcast Topic Selection</td>
</tr>
<tr>
<td>2</td>
<td>HCI Themes, Visual Perception and Human Cognition</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Example Seminars: 1 Multi-touch Interfaces 2 Seadragon and Photosynth</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Lecture Content and Seminar Topic 1 Topic 2</td>
<td>Assessment 1: Group Seminar, Slides and Peer Evaluations/Worksheet, 30%, Friday 3pm.</td>
</tr>
<tr>
<td>6</td>
<td>Lecture Content and Seminar Topic 3 Topic 4</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Lecture Content and Seminar Topic 5 Topic 6</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Lecture Content and Seminar Topic 7 Topic 8</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Lecture Content and Seminar Topic 9 Topic 10</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Lecture Content and Seminar Topic 11 Topic 12</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Lecture Content and Seminar Topic 13 Topic 14</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Interface Elements, Task and User Centred Design, Equity and Evaluation</td>
<td>Assessment 2: Practical Interface Design</td>
</tr>
<tr>
<td>Unit</td>
<td>Review of Seminar Topics</td>
<td>Portfolio, 30%, Friday 3pm.</td>
</tr>
<tr>
<td>------</td>
<td>-------------------------</td>
<td>------------------------------</td>
</tr>
<tr>
<td>13</td>
<td>Review of Seminar Topics</td>
<td>Assessment 3: Group Vodcast of another groups seminar, 15%, Friday 3pm 2 weeks after assigned seminar.</td>
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Unit Resources

Prescribed text(s) and readings

No textbook set for this semester.

Recommended text(s) and readings

Highly Recommended


The following recommended texts are available from the Berwick library.

- Steven Johnson (1997) Interface Culture ISBN 3608919805

Supplementary Library Resources


Required software and/or hardware

Graphic Development: Photoshop CS/CS2 and Illustrator CS/CS2

Portfolio Development in Director MX, Flash or Dreamweaver.

Students can access these packages during the tutorials in the computer labs or studios.

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 n 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:

The FIT2016 web site on Moodle, where lecture slides, weekly tutorial requirements, assignment specifications and supplementary material will be posted.

Discussion groups will be developed for each seminar topic and linked to from the Unit Homepage.

Seminar topics, student delivered seminar slides and vodcasts will also be posted on the Moodle site.

Library access

The Monash University Library site contains details about borrowing rights and catalogue searching. To learn more about the library and the various resources available, please go to http://www.lib.monash.edu.au. Be sure to obtain a copy of the Library Guide, and if necessary, the instructions for remote access from the library website.

Monash University Studies Online (MUSO)

All unit and lecture materials are available through MUSO (Monash University Studies Online). Blackboard is the primary application used to deliver your unit resources. Some units will be piloted in Moodle. If your unit is piloted in Moodle, you will see a link from your Blackboard unit to Moodle (http://moodle.monash.edu.au) and can bookmark this link to access directly. In Moodle, from the Faculty of Information Technology category, click on the link for your unit.

You can access MUSO and Blackboard via the portal: http://my.monash.edu.au

Click on the Study and enrolment tab, then Blackboard under the MUSO learning systems.

In order for your Blackboard unit(s) to function correctly, your computer needs to be correctly configured.

For example:

- Blackboard supported browser
- Supported Java runtime environment

For more information, please visit: http://www.monash.edu.au/muso/support/students/downloadables-student.html

You can contact the MUSO Support by: Phone: (+61 3) 9903 1268

For further contact information including operational hours, please visit: http://www.monash.edu.au/muso/support/students/contact.html

Further information can be obtained from the MUSO support site:
Assessment

Unit assessment policy

To pass this unit you will need to achieve a total mark of 50% or better over all assignments.

Note that:

Raw scores may be scaled,

Submission of group seminar slides for posting to the Moodle site for the unit is a barrier condition to receiving marks for assignment 1,

Completing a minimum of 4 Peer Evaluations/Worksheets is also a barrier condition to receiving marks for assignment 1,

Submission of the Vodcast assignment for posting to the Moodle site for the unit is a barrier condition to receiving marks for assignment 3.

Assignment tasks

• Assignment Task

  Title : Assignment 1: Group Seminar, Seminar Slides and Peer Evaluations/Worksheet. 30%.

  Description :

  This assessment task will require a group seminar presentation of 30 minutes in the lecture for the unit, plus a 10-minute question time. Each member in the group should contribute both to the research of the topic and the presentation of the seminar to the class. In order to present well in your seminar you will need to prepare a set of slides to guide your presentation. You will be marked on both the quality of the content presented and the manner in which the presentation is delivered. All Seminar Slides (20 max) on the seminar topics must be submitted for posting to the FIT2016 Moodle site by Friday 3 pm week 5 as a study resource for the exam. This includes those presentations that will be delivered after week 5. Submitting the powerpoint file for posting the slides is a barrier condition for receiving marks for this assignment.

  In your seminar you will be expected to:

  ♦ To define the nature of the seminar topic,
  ♦ Explain any terminology used,
  ♦ Discuss any historic development in this area of HCI research,
  ♦ Identify where the latest research into the area is being conducted,
  ♦ Discuss specific issues in HCI that need to be resolved or applications of this research,
  ♦ Discuss one or more examples or prototypes that are being developed,
  ♦ Discuss new and interesting solutions to the problems in HCI that have been identified,
  ♦ Outline further areas of related research that are emerging.

  All students are expected to attend and contribute to the question time of the seminars. Weighting of 15 marks.

  Assessment of seminar presentations will be based partly on lecturer assessment and partly on Peer Evaluation/Worksheets feedback sheets completed by all students.
Each week in the seminars you will be given a Seminar Peer Evaluation/Worksheet form for the seminar presentations, which must be completed and handed back at the end of the seminar. These will be used to help determine the grades for the group that is presenting the seminar. You will need to complete feedback on at least 4 of the seminars to be awarded any marks for the peer review/worksheet. This is a barrier condition and will be enforced strictly. You will receive two extra marks per seminar feedback correctly completed, up to the maximum of 15 marks.

If you have completed all feedback sheets appropriately you will be given full marks. You will only be able to fill in and hand back your own response each week in the seminar, no handing back multiple sheets and no handing back sheets from previous weeks.

Inadequate feedback on Seminar Peer Evaluation/Worksheet form will be assessed as being not completed. To fully complete the form you will need to complete all sections with thoughtful and considered comments on the quality of the research content and the presentation skills. Weighting of 15 marks.

Seminar topics to be selected from the list provided.

**Weighting :** 30%

**Criteria for assessment :**

Feedback and Assessment Criteria for Seminar Presentation (15 marks).

- Slides Uploaded to MUSO Yes/No
- Presentation Delivery and Slides Formatting (5)
- Content and Research (5)
- Prototype or Example Discussion (5)

**Due date :** Friday 3pm week 5

**Remarks (optional - leave blank for none) :**

For detailed descriptions of assessment tasks see the Detailed Descriptions of Assessment Tasks page.

**Assignment Task**

**Title :** Assignment 2: Practical Interface Design Portfolio, 30%.

**Description :**

Construct an interface for your HCI design portfolio and include 4 examples of your interface design skills based on the tutorial exercises provided:

- Portfolio interface - 6 marks
- Mobile Device interface - 6 marks
- Task Wizard interface design - 6 marks
- Game interface design - 6 marks
- Metaphor-based interface design task - 6 marks
Each design task will be conducted over two weeks in the tutorials. For each example your portfolio will include the design brief information, and your design solution for the task (two screens with rollovers that provide a description of the features of the interface).

**Weighting** : 30%

**Criteria for assessment** :

- Overall Portfolio Design (6)
- Mobile Device Interface (6)
- Task Wizard Interface (6)
- Game Interface (6)
- Metaphor-based Interface (6)

**Due date** : Friday 3 pm week 12.

**Remarks (optional - leave blank for none)** :

For detailed descriptions of assessment tasks see the Detailed Descriptions of Assessment Tasks page.

**Assignment Task**

**Title** : Assignment 3: Group Vodcast of Student Seminar, 15%.

**Description** :

In your seminar groups create a vodcast based on the seminar presentation of another group.

The vodcast should last for approximately 10 to 15 minutes so you will need to edit down the original presentations.

The presentation should have titles and credits.

You should insert graphics summarizing the main points covered.

The vodcast must be submitted for posting to the Moodle site so that others can study for the exam, and this is a barrier condition for receiving any marks for this assignment.

**Weighting** : 15%

**Criteria for assessment** :

- Capture of video and audio (5)
- Editing, transitions and sequencing (5)
- Titles, credits and summary graphics (5)

**Due date** : Friday 3 pm two weeks after the assigned seminar topic is delivered.
Remarks (optional - leave blank for none):

For detailed descriptions of assessment tasks see the Detailed Descriptions of Assessment Tasks page.

Examinations

• Examination

Weighting : 25%

Length : 2 hours

Type (open/closed book) : closed book

Remarks (optional - leave blank for none):

Exam will be based on the content covered in weeks 1 to 4 and 12, and on the lecture and seminar topics in weeks 5 to 11.

5 questions worth 2 marks each for a total of 10 marks for content in weeks 1 to 4 and 12,

5 questions worth 3 marks each for a total of 15 marks based on seminar topics presented by students and lecture content in weeks 5 to 11 selected at random.

Assignment submission

Assignments will be submitted by electronic (a labelled CD) and paper (documentation only) submission to Assignment boxes in Building 903 Level 1. On-campus Students Submit the assignment to the Assignment boxes in Building 903 Level 1 by the appropriate submission date, with the appropriate cover sheet correctly filled out and attached. The due date is the date by which the submission must be received.

Assignment coversheets

For assignments submitted to the Assignment boxes in Building 903 Level please staple or tape a signed hard copy of an assignment cover sheet.

For electronic submissions of assignment via MUSO or e-mail download an electronic copy of the cover sheet from the MUSO site and attach that.
University and Faculty policy on assessment

Due dates and extensions

The due dates for the submission of assignments are given in the previous section. 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 seldom regarded as appropriate reasons for granting extensions. Students are advised to NOT assume that granting of an extension is a matter of course.

You may request an extension via e-mail or in person at the front counter of Building 903 level 1 at Berwick.

Requests for extensions must be made to the unit lecturer at your campus at least two days before the due date. You will be asked to forward original medical certificates in cases of illness, and may be asked to provide other forms of documentation where necessary. A copy of the email or other written communication of an extension must be attached to the assignment submission.

Late assignment

Assignments received after the due date will be subject to a penalty of a 10% reduction in grade for each day (including weekends) the assignment is late. Late submissions MUST be time stamped and initialled when submitted. Assignments received later than one week after the due date will not normally be accepted.

This policy is strict because comments or guidance will be given on assignments as they are returned, and sample solutions may also be published and distributed, after assignment marking or with the returned assignment.

Return dates

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

Assessment for the unit as a whole is in accordance with the provisions of the Monash University Education Policy at http://www.policy.monash.edu/policy-bank/academic/education/assessment/

We will aim to have assignment results made available to you within two weeks after assignment receipt.

Plagiarism, cheating and collusion

Plagiarism and cheating are regarded as very serious offences. In cases where cheating has been confirmed, students have been severely penalised, from losing all marks for an assignment, to facing disciplinary action at the Faculty level. While we would wish that all our students adhere to sound ethical conduct and honesty, I will ask you to acquaint yourself with Student Rights and Responsibilities (http://www.infotech.monash.edu.au/about/committees-groups/facboard/policies/studrights.html) and the Faculty regulations that apply to students detected cheating as these will be applied in all detected cases.

In this University, cheating means seeking to obtain an unfair advantage in any examination or any other written or practical work to be submitted or completed by a student for assessment. It includes the use, or attempted use, of any means to gain an unfair advantage for any assessable work in the unit, where the means is contrary to the instructions for such work.

When you submit an individual assessment item, such as a program, a report, an essay, assignment or other piece of work, under your name you are understood to be stating that this is your own work. If a submission is identical
with, or similar to, someone else's work, an assumption of cheating may arise. If you are planning to work with another student, it is acceptable to undertake research together, and discuss problems, but it is not acceptable to jointly develop or share solutions unless this is specified by your lecturer.

Intentionally providing students with your solutions to assignments is classified as "assisting to cheat" and students who do this may be subject to disciplinary action. You should take reasonable care that your solution is not accidentally or deliberately obtained by other students. For example, do not leave copies of your work in progress on the hard drives of shared computers, and do not show your work to other students. If you believe this may have happened, please be sure to contact your lecturer as soon as possible.

Cheating also includes taking into an examination any material contrary to the regulations, including any bilingual dictionary, whether or not with the intention of using it to obtain an advantage.

Plagiarism involves the false representation of another person's ideas, or findings, as your own by either copying material or paraphrasing without citing sources. It is both professional and ethical to reference clearly the ideas and information that you have used from another writer. If the source is not identified, then you have plagiarised work of the other author. Plagiarism is a form of dishonesty that is insulting to the reader and grossly unfair to your student colleagues.

Register of counselling about plagiarism

The university requires faculties to keep a simple and confidential register to record counselling to students about plagiarism (e.g. warnings). The register is accessible to Associate Deans Teaching (or nominees) and, where requested, students concerned have access to their own details in the register. The register is to serve as a record of counselling about the nature of plagiarism, not as a record of allegations; and no provision of appeals in relation to the register is necessary or applicable.

Non-discriminatory language

The Faculty of Information Technology is committed to the use of non-discriminatory language in all forms of communication. Discriminatory language is that which refers in abusive terms to gender, race, age, sexual orientation, citizenship or nationality, ethnic or language background, physical or mental ability, or political or religious views, or which stereotypes groups in an adverse manner. This is not meant to preclude or inhibit legitimate academic debate on any issue; however, the language used in such debate should be non-discriminatory and sensitive to these matters. It is important to avoid the use of discriminatory language in your communications and written work. The most common form of discriminatory language in academic work tends to be in the area of gender inclusiveness. You are, therefore, requested to check for this and to ensure your work and communications are non-discriminatory in all respects.

Students with disabilities

Students with disabilities that may disadvantage them in assessment should seek advice from one of the following before completing assessment tasks and examinations:

- Faculty of Information Technology Student Service staff, and / or
- your Unit Coordinator, or
- Disabilities Liaison Unit
Deferred assessment and special consideration

Deferred assessment (not to be confused with an extension for submission of an assignment) may be granted in cases of extenuating personal circumstances such as serious personal illness or bereavement. Information and forms for Special Consideration and deferred assessment applications are available at http://www.monash.edu.au/exams/special-consideration.html. Contact the Faculty's Student Services staff at your campus for further information and advice.