



**MONASH** University

**FIT5152**  
**User interface design and development**

**Unit guide**

**Semester 1, 2009**

*Last updated : 20 Apr 2009*

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# **FIT5152 User interface design and development - Semester 1, 2009**

## **Unit leader :**

Julie Fisher

## **Lecturer(s) :**

### **Clayton**

- Julie Fisher

## **Tutors(s) :**

### **Clayton**

- TBA

## **Introduction**

Welcome to FIT5152 User Interface Design and Development - This unit provides a detailed understanding of user interface design principles and practices for computer-based systems. The principles, guidelines and theories of Human Computer Interaction are explored. The unit examines issues in interface design from various perspectives and how to manage this during systems development. It explores contemporary issues including: background and underpinning theories, guidelines and standards, design processes and implementation in practice, user interface evaluation methods, interface styles and componential design. The application of interface design in other environments such as virtual reality and mobile devices will be covered

The unit is an on-campus unit and as such is structured, taught and assessed on the assumption that ALL students who choose to enrol can, and will, attend ALL classes. Attendance will be monitored. The assessment tasks for the unit require attendance at classes for completion as well as group allocation. No alternative arrangements will be allowed.

## **Unit synopsis**

ASCED Discipline Group classification: 029999 Information technology not elsewhere classified

## **Learning outcomes**

The unit introduces students to the theories and principles behind User Interface Design from the perspective of Human Computer Interaction. At the completion of the unit students should be able to:

- Understand from a management as well as technology perspective how the theories, guidelines and standards can be incorporated into the design of user interfaces.
- Understand and apply the principles of interface design relating to HCI; this includes recognising good and bad examples.

- Apply the standards, principles and theories in practice.
- Develop and conduct usability evaluation and be able to interpret the results, identifying changes that are needed to a user interface.
- Understand the different design considerations for designing for the Web and mobile devices.

## Workload

The unit is an on-campus unit and as such is structured, taught and assessed on the assumption that ALL students who choose to enrol can, and will, attend ALL classes. Attendance will be monitored. The assessment tasks for the unit require attendance at classes for task completion as well as group allocation. No alternative arrangements will be allowed.

This is a six point unit which, according to University guidelines, requires you to spend 12 hours per week (a total of at least 156 hours per semester for a normal 13 week semester).

The anticipated workload is:

- 2 hours per week lecture and
- 1 hour per week tutorial plus
- 7 hours per week preparation, online contributions and assignments
- minimum of 2 hours per week additional reading

## Unit relationships

### Prerequisites

Before attempting this unit you must have satisfactorily completed

FIT9004, FIT9003, or equivalent.

### Relationships

FIT5152 is a core unit in the Business Application Development professional track of the Master of Business Information Systems, Master of Information Management and Systems, and Master of Business Systems degrees, and an elective unit for students taking other professional tracks, or other masters degrees from within the Faculty.

Before attempting this unit you must have satisfactorily completed FIT9004, FIT9003 or equivalent.

You may not study this unit and IMS5302, CSE3030 or CSE5930 in your degree.

## Continuous improvement

Monash is committed to 'Excellence in education' (Monash Directions 2025 - <http://www.monash.edu.au/about/monash-directions/directions.html>) 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. One of the key formal ways students have to provide feedback is through Unit Evaluation Surveys. The University's Unit Evaluation policy (<http://www.policy.monash.edu/policy-bank/academic/education/quality/unit-evaluation-policy.html>) requires that every unit offered is 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.

Faculties have the option of administering the Unit Evaluation survey online through the my.monash portal or in class. Lecturers will inform students of the method being used for this unit towards the end of the semester.

## Student Evaluations

If you wish to view how previous students rated this unit, please go to <http://www.adm.monash.edu.au/cheq/evaluations/unit-evaluations/>

## Improvements to this unit

This unit is continuously reviewed, lecture and tutorial, material and assignments change as does the exam each semester.

## Unit staff - contact details

### Unit leader

#### Associate Professor Julie Fisher

Associate Professor

Phone +61 3 990 32621

Fax +61 3 99031077

Contact hours : Clayton 11-12 and 3-4 Tuesday, Caulfield Friday 10-11am

### Lecturer(s) :

#### Associate Professor Julie Fisher

Associate Professor

Phone +61 3 990 32621

Fax +61 3 99031077

### Tutor(s) :

## Additional communication information

Julie Fisher is based at Caulfield and attends Clayton on Tuesdays. Julie is part time and unavailable on Mondays

Contact details regarding tutor/s for this unit will be advised during the lecture and on the Moodle website.

## Teaching and learning method

The lectures will provide material to stimulate discussion and debate where possible. Some reading will be required prior to the lecture.

Tutorials will involve discussions, debate, critiquing and practical non computer based activities. There will be reading that students will need to undertake for the tutorials.

## Tutorial allocation

All students should register for a tutorial through Allocate+

## 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

Week	Topic	References/Readings	Key dates
1	Introduction to the unit	ACM Special Interest Group on Computer-Human Interaction (SIGCHI). ACM SIGCHI is an international, interdisciplinary forum for the exchange of ideas about the field of human-computer interaction. <a href="http://www.acm.org/sigchi/">http://www.acm.org/sigchi/</a>	No tutorial in week one.
2	Theories, standards and guidelines	Bevan (2001) International standards for HCI and usability, International Journal of Human Computer Studies, vol 55	
3	Interface design background	Plagiarism exercise available from the Moodle site should be completed before tutorial 2	
4	Componential design and interface design elements	Barfield, W., C. Rosenberg and G. Levasseur (1991). "The Use of Icons, Earcons and Commands in the Design of an Hierarchical Menu." IEEE Transactions on Professional Communication: 101-108.	
5	User interaction	Inkpen, K (2001) Drag-and-drop versus point-and-click mouse interaction styles for children <a href="http://portal.acm.org/citation.cfm?doid=371127.371146">http://portal.acm.org/citation.cfm?doid=371127.371146</a>	
6	Designing user information	Fisher, J. (1999J). " The Importance of User Message Text and why Professional Writers should be Involved." Australian Computer Journal 31(4): 118-123	Assignment 1 to be completed during this week's tutorial
Mid semester break			
7	Designing for usability	<a href="http://mashable.com/2009/01/09/user-experience-design/">http://mashable.com/2009/01/09/user-experience-design/</a>	
8	Data gathering and task analysis and Prototyping	TBA	
9	Evaluation and usability testing	TBA	
10	The Web, ecommerce and other interfaces What is different?	TBA	Tutorial time for assistance with Assignment 2

11	Accessibility	TBA	Students to present final assignment during tutorial
12	Guest speaker		Assignment 2 due Friday May 29 4pm. Students to present final assignment during tutorial
13	Summary	Mock exam available and should be completed before week 13	Tutorial mock exam and revision

## Unit Resources

### Prescribed text(s) and readings

Sharp, Rogers, Preece, (2007). Interaction Design: behind Human-computer interaction, 2nd edition. Wiley

Text books are 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

Norman, D., (1990). The design of everyday things. Doubleday.

Shneiderman, B and Plaisant C. (2005). Designing the user interface. Addison Wesley.

### Equipment and consumables required or provided

Students are required to have the minimum system configuration specified by the Faculty as a condition of accepting admission, and regular Internet access. Information about computer use for students is available from the ITS Student Resource Guide in the Monash University Handbook.

### Study resources

Study resources we will provide for your study are:

- \* Weekly detailed lecture notes and details of required readings;
- \* Weekly tutorial tasks and exercises ;
- \* Assignment specifications;
- \* This Unit Guide outlining the administrative information for the unit;
- \* The unit web site on MUSO, <http://moodle.med.monash.edu.au>. All materials will be available on Moodle

### 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>.

The Educational Library and Media Resources (LMR) is also a very resourceful place to visit at <http://www.education.monash.edu.au/library/>

## 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:  
<http://www.monash.edu.au/muso/support/index.html>

## Assessment

### Unit assessment policy

The unit is assessed with two assignments, active participation in tutorials and online discussion and a three hour closed book examination.

To pass this unit, a student must obtain :

- \* 40% or more in the unit's examination and
  - \* 40% or more in the unit's 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 assessment then a mark of no greater than 44-N will be recorded for the unit.

Further, a student MUST achieve a mark of 50% or above in the exam to be awarded a grade of C or higher. If a student achieves more than 40% but less than 50% in the exam and has 40% or more in the non-examination assessment then a mark of no greater than 55P will be recorded for the unit.

## Assignment tasks

- **Assignment Task**

**Title :** Assignment 1: Menu design

**Description :**

In tutorial 5, Week 6, students will demonstrate their knowledge of theories and guidelines relating to designing menus covered to that point. Students must attend the tutorial to complete the assessment.

**Weighting :** 15%

**Criteria for assessment :**

The criteria for assessment will be provided with the assignment specification and is available on Moodle.

**Due date :** During the tutorial Week 6

- **Assignment Task**

**Title :** Assignment 2: Evaluating for usability

**Description :**

Group assignment and presentation

**Weighting :** 30%

**Criteria for assessment :**

The criteria for assessment will be provided with the assignment specification and is available on Moodle.

**Due date :** 29th May 2009, 4pm

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

Assignment 2 is a **group assignment**. Groups must be organised and finalised by week 6. No other arrangements will be allowed.

- **Assignment Task**

**Title :** Active participation in tutorial and Online discussion

**Description :**

Students will be expected to contribute regularly to an online discussion forum **and to actively participate in tutorial classes**.

**Weighting :** 15%

**Criteria for assessment :**

The criteria for assessment will be explained in the first lecture with further details available on Moodle.

**Due date :** Throughout the semester

## Examinations

- **Examination 1**

**Weighting** : 40%

**Length** : 3 hours

**Type ( open/closed book )** : Closed book

## Assignment submission

Assignments must be submitted during the tutorial you attend. Submission should be to **your tutor** with the assignment cover sheet. The due date is the date by which the submission must be received.

## Assignment coversheets

The coversheet is available from <http://www.infotech.monash.edu.au/resources/student/forms/website>

## 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.

Requests for extensions must be made only 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. The length of an extension will be partly determined by when the extension was asked for. It will be assumed that students have been working on the assignment up to the point the extension was applied for.

## Late assignment

Assignments received after the due date will be subject to a penalty of **10% per day** and **Assignments received later than one week after the due date will not normally be accepted.**

## 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 the University Plagiarism policy and procedure (<http://www.policy.monash.edu/policy-bank/academic/education/conduct/plagiarism-procedures.html>) which applies to students detected plagiarising.

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 on working 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.