

**FIT3063**  
**Human-computer interaction**

**Unit Guide**

**Semester 2, 2015**

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*Last updated: 14 Jul 2015*

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# **FIT3063 Human-computer interaction - Semester 2, 2015**

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.

## **Mode of Delivery**

- Caulfield (Day)
- Malaysia (Day)
- South Africa (Day)

## **Workload Requirements**

Minimum total expected workload equals 12 hours per week comprising:

(a.) Contact hours for on-campus students:

- Two hours of lectures
- One 2-hour tutorial

(b.) Additional requirements (all students):

- A minimum of 2-3 hours of personal study per one hour of contact time in order to satisfy the reading and assignment expectations.

See also Unit timetable information

## **Unit Relationships**

### **Prohibitions**

CSE3030, FIT2016, FIT3033, GCO3814, IMS2403, IMS3470, MMS2403

### **Prerequisites**

One of FIT2001, FIT2027, IMS2805, CSE2200 or equivalent

## **Chief Examiner**

Dr Marc Cheong

## **Campus Lecturer**

### **Caulfield**

**Manoj Kathpalia**

**William Lay**

### **South Africa**

**Johann Smith**

### **Malaysia**

**Dr Anushia Inthiran**

## **Your feedback to Us**

Monash is committed to excellence in education and regularly seeks feedback from students, employers and staff. One of the key formal ways students have to provide feedback is through the Student Evaluation of Teaching and Units (SETU) survey. The University's student evaluation policy requires that every unit is evaluated each year. Students are strongly encouraged to complete the surveys. The feedback is anonymous and provides the Faculty with evidence of aspects that students are satisfied and areas for improvement.

For more information on Monash's educational strategy, see:

[www.monash.edu.au/about/monash-directions/](http://www.monash.edu.au/about/monash-directions/) and on student evaluations, see:  
[www.policy.monash.edu/policy-bank/academic/education/quality/student-evaluation-policy.html](http://www.policy.monash.edu/policy-bank/academic/education/quality/student-evaluation-policy.html)

## **Previous Student Evaluations of this Unit**

Student feedback informed improvements to this unit including:

- reverting to the 'design assignment' model from prior semesters
- using more up-to-date software for prototyping (i.e. the Pencil open-source project), to slowly phase out the older MockupScreens system.
- tutorial activities and online forum discussions contribute to part of the assessment

If you wish to view how previous students rated this unit, please go to  
<https://emuapps.monash.edu.au/unitevaluations/index.jsp>

# Academic Overview

## Learning Outcomes

At the successful completion of this unit, students should be able to:

1. describe the theories and principles of HCI;
2. apply HCI principles to interface and interaction design;
3. design for user diversity and accessibility;
4. employ user-centred interaction design;
5. design an effective user interface;
6. evaluate an interaction design.

## Unit Schedule

Week	Activities	Assessment
0	(none)	No formal assessment or activities are undertaken in week 0
1	Unit overview. Introduction to HCI.	Tutorial 1. Assessment task 1 assessed from Week 2 to Week 11.
2	HCI and its evolution.	Tutorial 2
3	Design: Theories and Models.	Tutorial 3
4	Design: Principles, standards, guidelines, stylesheets.	Tutorial 4
5	HCI design methods and principles.	Tutorial 5
6	Interface design elements.	Tutorial 6
7	Interaction styles.	Tutorial 7. Assessment task 2 - stage I due.
8	Usability.	Tutorial 8
9	Accessibility.	Tutorial 9
10	Interaction devices.	Tutorial 10. Assessment task 2 - stage II due.
11	Designing for the Web and Web 2.0.	Tutorial 11. Assessment task 2 - stage III presentations.
12	Guest lecture (subject to availability) and future of HCI.	Tutorial 12. Assessment task 2 - stage III presentations; and stage IV due.
	SWOT VAC	No formal assessment is undertaken in SWOT VAC
	Examination period	LINK to Assessment Policy: <a href="http://policy.monash.edu.au/policy-bank/academic/education/assessment/assessment-in-coursework-policy.html">http://policy.monash.edu.au/policy-bank/academic/education/assessment/assessment-in-coursework-policy.html</a>

\*Unit Schedule details will be maintained and communicated to you via your learning system.

## Teaching Approach

### Lecture and tutorials or problem classes

This teaching and learning approach provides facilitated learning, practical exploration and peer learning through a variety of activities.

### Assessment Summary

Examination (3 hours): 50%; In-semester assessment: 50%

Assessment Task	Value	Due Date
Active participation in tutorials, panel discussions and the discussion fora	15%	Tutorials, panel discussions, and discussion fora contributions will be assessed from Week 2 to Week 11

## Unit Schedule

User Interface Design and Evaluation	35%	Stage I due in Week 7; Stage II due in Week 10; Stage III presentations taking place in Weeks 11 and 12; Stage IV due in Week 12.
Examination 1	50%	To be advised

# Assessment Requirements

## Assessment Policy

Faculty Policy - Unit Assessment Hurdles

(<http://intranet.monash.edu.au/infotech/resources/staff/edgov/policies/assessment-examinations/assessment-hurdles>)

Academic Integrity - Please see resources and tutorials at

<http://www.monash.edu/library/skills/resources/tutorials/academic-integrity/>

## Assessment Tasks

### Participation

#### • Assessment task 1

**Title:**

Active participation in tutorials, panel discussions and the discussion fora

**Description:**

Students are required to participate throughout the semester in all the learning activities, these include:

- ◆ online forums available through the unit's Moodle site
- ◆ tutorial activities
- ◆ panel-style discussion during tutorials.

*Learning Outcomes: 1, 2, 4, 6*

**Weighting:**

15%

**Criteria for assessment:**

Criteria for assessment will be based on:

- ◆ relevance of contributions;
- ◆ evidence of wider reading;
- ◆ level of critical thinking and quality of contribution (and in group-based fora);
- ◆ contribution to discussions including quality and number of postings (using Moodle) and
- ◆ general participation

**Due date:**

Tutorials, panel discussions, and discussion fora contributions will be assessed from Week 2 to Week 11

#### • Assessment task 2

**Title:**

User Interface Design and Evaluation

**Description:**

Students will be required to form groups to design a modern website and present the outcomes in class. Upon conclusion, students will also independently evaluate another group's website. The assessment breakdown is as follows:



## Assessment Requirements

- ◆ 5% for a sketch of a low-level prototype and a report on the design considerations (Stage I).
- ◆ 20% (15% + 5%) - 15% for the design of a high-level prototype and report on the process (Stage II) + 5% for the presentation of the prototype in the tutorials in Weeks 11 and 12 (Stage III).
- ◆ 10% for an independent Heuristic Evaluation of another group's prototype (Stage IV).

*Learning Outcomes: 2, 3, 4, 5, 6*

### **Weighting:**

35%

### **Criteria for assessment:**

In this assignment students will demonstrate their knowledge, skills and understanding of the principles and theories covered through the semester.

Contributions by individual group members to the overall group submission will be recorded by each group member and will be assessed by the markers in determining the grade awarded to each member of a group. Assessment criteria will be made available in the specifications sheet.

### **Due date:**

Stage I due in Week 7; Stage II due in Week 10; Stage III presentations taking place in Weeks 11 and 12; Stage IV due in Week 12.

### **Remarks:**

Groups will be finalised by Week 5 of semester and all group members must belong to the same tutorial. Forming groups across tutorials will NOT be allowed due to logistical constraints.

## Examinations

### • Examination 1

#### **Weighting:**

50%

#### **Length:**

3 hours

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

Closed book

#### **Electronic devices allowed in the exam:**

None

## Learning resources

### Reading list

Cooper, A., Reimann, R. & Cronin, D. (2007) About Face 3: The Essentials of Interaction design, John Wiley & Sons

Shneiderman, B. (2010) Designing the User Interface. 5th Edition. Addison-Wesley.

## Assessment Requirements

Norman, Donald (2013) The Design of Everyday Things: Revised and Expanded Edition, Basic Books.

Monash Library Unit Reading List (if applicable to the unit)

<http://readinglists.lib.monash.edu/index.html>

## Feedback to you

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

- Informal feedback on progress in labs/tutes
- Graded assignments with comments
- Interviews
- Other: Informal feedback including sample answers from peers in tutes.

## Extensions and penalties

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.monash.edu.au/exams/special-consideration.html>

## Returning assignments

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

## Assignment submission

It is a University requirement

(<http://www.policy.monash.edu/policy-bank/academic/education/conduct/student-academic-integrity-managing-pla>

for students to submit an assignment coversheet for each assessment item. Faculty Assignment coversheets can be found at <http://www.infotech.monash.edu.au/resources/student/forms/>. Please check with your Lecturer on the submission method for your assignment coversheet (e.g. attach a file to the online assignment submission, hand-in a hard copy, or use an electronic submission). Please note that it is your responsibility to retain copies of your assessments.

## Online submission

If Electronic Submission has been approved for your unit, please submit your work via the **Moodle 2** learning system for this unit, which you can access via links in the my.monash portal.

## Required Resources

Please check with your lecturer before purchasing any Required Resources. Limited copies of prescribed texts are available for you to borrow in the library, and prescribed software is available in student labs.

For the design of GUI mockups:

- Pencil Project (open-source)

## **Prescribed text(s)**

Limited copies of prescribed texts are available for you to borrow in the library.

Rogers, Y. Sharp, H. and Preece, J. (2011). *Interaction Design: beyond human-computer interaction*. (3rd Edition) Wiley.

## **Technological Requirements**

Students must regularly check Moodle 2.0 for announcements.

Moodle is also used to disseminate courseware for this subject and for assessment submission.

It is strongly recommended that students bring a laptop, and/or tablet to lectures and tutorials in order to take part in interactive discussions/activities.

(Please refer to the *Required Resources* section for a list of software needed for this course.)

## Other Information

### Policies

Monash has educational policies, procedures and guidelines, which are designed to ensure that staff and students are aware of the University's academic standards, and to provide advice on how they might uphold them. You can find Monash's Education Policies at:

[www.policy.monash.edu.au/policy-bank/academic/education/index.html](http://www.policy.monash.edu.au/policy-bank/academic/education/index.html)

### Faculty resources and policies

Important student resources including Faculty policies are located at

<http://intranet.monash.edu.au/infotech/resources/students/>

### Graduate Attributes Policy

<http://www.policy.monash.edu/policy-bank/academic/education/management/monash-graduate-attributes-policy.h>

### Student Charter

[www.opq.monash.edu.au/ep/student-charter/monash-university-student-charter.html](http://www.opq.monash.edu.au/ep/student-charter/monash-university-student-charter.html)

### Student services

The University provides many different kinds of support services for you. Contact your tutor if you need advice and see the range of services available at <http://www.monash.edu.au/students>. For Malaysia see <http://www.monash.edu.my/Student-services>, and for South Africa see <http://www.monash.ac.za/current/>.

### Monash University Library

The Monash University Library provides a range of services, resources and programs that enable you to save time and be more effective in your learning and research. Go to [www.lib.monash.edu.au](http://www.lib.monash.edu.au) or the library tab in [my.monash](#) portal for more information. At Malaysia, visit the Library and Learning Commons at <http://www.lib.monash.edu.my/>. At South Africa visit <http://www.lib.monash.ac.za/>.

### Disability Liaison Unit

Students who have a disability or medical condition are welcome to contact the Disability Liaison Unit to discuss academic support services. Disability Liaison Officers (DLOs) visit all Victorian campuses on a regular basis.

- Website: <http://www.monash.edu/equity-diversity/disability/index.html>
- Telephone: 03 9905 5704 to book an appointment with a DLO; or contact the Student Advisor, Student Community Services at 03 55146018 at Malaysia
- Email: [dlu@monash.edu](mailto:dlu@monash.edu)
- Drop In: Equity and Diversity Centre, Level 1, Building 55, Clayton Campus, or Student Community Services Department, Level 2, Building 2, Monash University, Malaysia Campus