



<https://courseoutline.auckland.ac.nz/dco/course/COMPSCI/345/1213>

COMPSCI 345 : Human-computer Interaction

Science

2021 Semester One (1213) (15 POINTS)

Course Prescription

Human behaviour and humans' expectations of computers. Computer interfaces and the interaction between humans and computers. The significance of the user interface, interface design and user centred design process in software development. Interface usability evaluation methodologies and practice. Includes a group development and evaluation project using current implementation techniques and tools.

Course Overview

Welcome to Human Computer Interaction (HCI). For computer users the interface 'is' the system and for the 'average' system over half the code is entirely about managing the user interaction. This makes HCI an important area of study and research within Computer Science. As you will find during the course, HCI encompasses everything from designing a simple web page like this to developing Virtual Reality environments! We often combine knowledge from psychology, design and computer science. The course emphasises two complementary competencies of HCI: the ability to evaluate usability of a user interface, and the ability to design a usable interface, and these will be part of the coursework. We have a few guest lecturers each semester to offer broader perspectives.

Course Requirements

Prerequisite: COMPSCI 230 or SOFTENG 206 Restriction: SOFTENG 350

Capabilities Developed in this Course

- Capability 1: Disciplinary Knowledge and Practice
- Capability 2: Critical Thinking
- Capability 3: Solution Seeking
- Capability 4: Communication and Engagement
- Capability 5: Independence and Integrity
- Capability 6: Social and Environmental Responsibilities

Learning Outcomes

By the end of this course, students will be able to:

1. Perform a usability assessment of a system and communicate the findings effectively (Capability 1, 2 and 4)
2. Perform requirements analysis activities to inform user interface design (Capability 1 and 2)
3. Create and justify a conceptual design and accompanying low-fidelity design (Capability 1, 2, 3 and 4)
4. Create and justify a high-fidelity design incorporating use of fonts, colours and border designs with an appropriate prototype implementation (Capability 1, 2, 3 and 4)
5. Appreciate and apply principles of fundamental human capabilities for usability assessment and design (Capability 1 and 2)
6. Understand and describe in human-computer interaction including emerging interaction technologies and other current topics (will vary semester to semester; e.g. gamification, data visualisation)
7. Appreciate the importance of, and have the skills to practice, design for equity of access (notably for blind and vision-impaired users) (Capability 6)
8. Work collaboratively as part of a group on a design activity (Capability 4)
9. Work independently to investigate design requirements and solutions (Capability 5)

Assessments

Assessment Type	Percentage	Classification
Coursework	30%	Individual Coursework
Coursework	30%	Group Coursework
Test	25%	Individual Test
Tutorials	10%	Individual Coursework
Reflection	5%	Individual Coursework
5 types	100%	

Assessment Type	Learning Outcome Addressed								
	1	2	3	4	5	6	7	8	9
Coursework	✓	✓	✓	✓	✓	✓	✓		✓
Coursework	✓	✓	✓	✓	✓	✓	✓	✓	✓
Test	✓	✓	✓	✓	✓	✓	✓		✓
Tutorials	✓	✓	✓	✓	✓	✓	✓	✓	✓
Reflection	✓	✓	✓	✓	✓	✓	✓		✓

Special Requirements

Must pass practical (coursework) and theory (test) components.

Workload Expectations

This course is a standard 15 point course and students are expected to spend 10 hours per week involved in each 15 point course that they are enrolled in.

For this course, each week you can expect 2 hours of lectures, a 2-hour tutorial, 2 hours of reading and thinking about the content and 4 hours of work on assignments and/or test preparation.

Delivery Mode

Campus Experience

Attendance is expected at scheduled activities including labs/tutorials, with submitted work to receive credit for that component of the course.

Lectures will be available as recordings. Other learning activities including tutorials/labs will not be available as recordings.

Attendance on campus is required for the test and an online option will be available for overseas students.

The activities for the course are scheduled as a standard weekly timetable.

Learning Resources

A reading list will be provided.

Student Feedback

During the course Class Representatives in each class can take feedback to the staff responsible for the course and staff-student consultative committees.

At the end of the course students will be invited to give feedback on the course and teaching through a tool called SET or Qualtrics. The lecturers and course co-ordinators will consider all feedback.

Your feedback helps to improve the course and its delivery for all students.

Digital Resources

Course materials are made available in a learning and collaboration tool called Canvas which also includes reading lists and lecture recordings (where available).

Please remember that the recording of any class on a personal device requires the permission of the instructor.

Academic Integrity

The University of Auckland will not tolerate cheating, or assisting others to cheat, and views cheating in coursework as a serious academic offence. The work that a student submits for grading must be the student's own work, reflecting their learning. Where work from other sources is used, it must be properly acknowledged and referenced. This requirement also applies to sources on the internet. A student's assessed work may be reviewed against online source material using computerised detection mechanisms.

Copyright

The content and delivery of content in this course are protected by copyright. Material belonging to others may have been used in this course and copied by and solely for the educational purposes of the University under license.

You may copy the course content for the purposes of private study or research, but you may not upload onto any third party site, make a further copy or sell, alter or further reproduce or distribute any part of the course content to another person.

Inclusive Learning

All students are asked to discuss any impairment related requirements privately, face to face and/or in written form with the course coordinator, lecturer or tutor.

Student Disability Services also provides support for students with a wide range of impairments, both visible and invisible, to succeed and excel at the University. For more information and contact details, please visit the [Student Disability Services' website](http://disability.auckland.ac.nz) <http://disability.auckland.ac.nz>

Special Circumstances

If your ability to complete assessed coursework is affected by illness or other personal circumstances outside of your control, contact a member of teaching staff as soon as possible before the assessment is due.

If your personal circumstances significantly affect your performance, or preparation, for an exam or eligible written test, refer to the University's [aegrotat or compassionate consideration page](https://www.auckland.ac.nz/en/students/academic-information/exams-and-final-results/during-exams/aegrotat-and-compassionate-consideration.html) <https://www.auckland.ac.nz/en/students/academic-information/exams-and-final-results/during-exams/aegrotat-and-compassionate-consideration.html>.

This should be done as soon as possible and no later than seven days after the affected test or exam date.

Learning Continuity

In the event of an unexpected disruption we undertake to maintain the continuity and standard of teaching and learning in all your courses throughout the year. If there are unexpected disruptions the University has contingency plans to ensure that access to your course continues and your assessment is fair, and not compromised. Some adjustments may need to be made in emergencies. You will be kept fully informed by your course co-ordinator, and if disruption occurs you should refer to the University Website for information about how to proceed.

Level 1: Delivered normally as specified in delivery mode

Level 2: You will not be required to attend in person. All teaching and assessment will have a remote option.

Level 3 / 4: All teaching activities and assessments are delivered remotely

Student Charter and Responsibilities

The Student Charter assumes and acknowledges that students are active participants in the learning process and that they have responsibilities to the institution and the international community of scholars. The University expects that students will act at all times in a way that demonstrates respect for the rights of other students and staff so that the learning environment is both safe and productive. For further information visit [Student Charter](https://www.auckland.ac.nz/en/students/forms-policies-and-guidelines/student-policies-and-guidelines/student-charter.html) <https://www.auckland.ac.nz/en/students/forms-policies-and-guidelines/student-policies-and-guidelines/student-charter.html>.

Disclaimer

Elements of this outline may be subject to change. The latest information about the course will be available for enrolled students in Canvas.

In this course you may be asked to submit your coursework assessments digitally. The University reserves the right to conduct scheduled tests and examinations for this course online or through the use of computers or other electronic devices. Where tests or examinations are conducted online remote invigilation arrangements may be used. The final decision on the completion mode for a test or examination, and remote invigilation arrangements where applicable, will be advised to students at least 10 days prior to the scheduled date of the assessment, or in the case of an examination when the examination timetable is published.