

## 1. General Course Information

## 1.1 Course Details

Course Code:	1805ICT	
Course Name:	Human Computer Interaction	
Trimester:	Trimester 3, 2021	
Program:	Diploma of Information Technology	
Credit Points:	10	
Course Coordinator:	Dr Rob Baltrusch	
Document modified:	18th September 2020	

## Course Description

Human Computer Interaction (HCI), is a first-year course which provides an introduction to the principles and practices of effective Human Computer Interaction. We will explore the origins of HCI and the theories and frameworks that form the fundamentals of the discipline. We will then look at the practical tools and techniques that you can use to develop technology that embodies best practice in HCI - a positive user experience, and a high level of usability within your technology. You will have the opportunity to apply HCI practices to a 'real world' problem and develop a design brief for a client. You will also learn how to apply these practices to different problem situations and various technology contexts, including emerging technologies.

A key component to the discipline of Information Technology is the understanding and the involvement of the user in the development of IT applications and systems. IT graduates must develop a mind-set that recognizes the importance of users and organisational contexts and employ user-centred methodologies in the development, evaluation, and deployment of IT applications and systems. This requires graduates to develop knowledge of HCI including user and task analysis, human factors, ergonomics, application domains, user interface development tools and Graphical User Interface (GUI) frameworks, accessibility standards, and cognitive psychology.

## Assumed Knowledge

There are no prerequisites for this course

## 1.2 Teaching Team

Your teacher can be contacted via the email system on the portal.				
Name Email				
Dr Rob Baltrusch <u>rob.baltrusch@grifftihcollege.edu.au</u>				

## 1.3 Staff Consultation

Your teacher is available each week for consultation outside of normal class times. Times that your teacher will be available for consultation will be available on the Moodle Course Site.

#### 1.4 Timetable

Your timetable is available on the Griffith College Portal at Class Timetable in Student and Services.

## 1.5 Technical Specifications

All students must have access to a computer or suitable mobile device.

## 2. Aims, Outcomes & Generic Skills

## 2.1 Course Aims

The extent to which people will interact with a digital system depends not only on the usefulness of the system but also on experience of the person's interaction with the system. Now more than ever before people are interacting with digital systems for reasons ranging from entertainment to 'mission critical' activities. This course thus aims to equip students with the foundational theoretical knowledge, practical skills and experiences of process required to create and evaluate human interaction with computing systems.



## 2.2 Learning Outcomes

After successfully completing this course you should be able to:

- 1 Demonstrate an understanding of the relationship between HCI models, theories, and frameworks, and their application to digital interaction, interfaces and products;
- 2 Demonstrate an understanding of the differences in designing and developing technology for different application environments and digital media, including desktop and mobile, and emerging technologies such as wearable, and virtual reality systems.
- **3** Evaluate usability of existing technology applications by using the appropriate performance and preference metrics; Analyse usability testing results and recommend changes.
- 4 Apply HCI models, theories and processes to design an interactive application for an industry context.

## 2.3 Generic skills and capabilities

For further details on the Generic Skills please refer to the <u>Graduate Generic Skills and Capabilities policy</u>.

Griffith College aims to develop graduates who have an open and critical approach to learning and a capacity for lifelong learning. Through engagement in their studies, students are provided with opportunities to begin the development of these and other generic skills.

Studies in this course will give you opportunities to begin to develop the following skills:

Generic Skills and Capabilities	Taught	Practised	Assessed	
Acquisition of discipline knowledge and skills with critical judgement	•	√	✓	<b>√</b>
Communication and collaboration	ä	√	✓	✓
Self-directed and active learning			<b>√</b>	
Creative and future thinking	9	<b>√</b>	<b>√</b>	
Social responsibility and ethical awareness	4		✓	
Cultural competence and awareness in a culturally diverse environment	***	<b>√</b>	<b>√</b>	



## 3. Learning Resources

## 3.1 Required Learning Resources

There is no prescribed text book for this course

## 3.2 Recommended Learning Resources

- I. S. MacKenzie, "Human-Computer Interaction: An Empirical Research Perspective", Elsevier Science, 2012.
- J. M. Carroll, "HCI Models, Theories, and Frameworks : Toward a Multidisciplinary Science", Elsevier Science, 2003.

## 3.3 College Support Services and Learning Resources

The College provides many facilities and support services to assist students in their studies. Links to information about College support resources that are available to students are included below for easy reference.

<u>Digital Library</u> – Databases to which Griffith College students have access to through the Griffith Library Databases.

MyStudy – there is a dedicated website for this course via MyStudy on the Griffith College Portal.

Griffith College is committed to ensuring academic integrity is understood and maintained by all staff and students. All students learn about academic integrity through engagement with the weighted Epigeum modules within the suite of Academic and Professional Studies courses.

Services and Support provides a range of services to support students throughout their studies including academic advice and assignment help from Student Learning Advisors, and personal and welfare support from Student Counsellors.

<u>Jobs and Employment</u> in the Student Hub can assist students with career direction, resume and interview preparation, job search tips, and more.

IT Support provides details of accessing support, information on s numbers and internet access and computer lab

## 3.4 Other Information about your Learning

#### **Attendance**

You are expected to actively engage in all learning experiences and learning activities which underpin the learning content in this course. You are expected to engage with the learning content and learning activities outside of timetabled class times. This requires you to be an active agent of your learning. You are expected to bring all necessary learning resources to class such as the required textbook and /or Workbook. In addition, you are encouraged to BYOD (bring your own device) to class such as a laptop or tablet. This is not a requirement as computer lab facilities are available on campus, however, the use of such devices in the classroom is encouraged with appropriate and considerate use principles being a priority.

#### **Preparation and Participation in Learning**

In order to enhance your learning, you need to prepare before participating in the learning experiences. Absorb the learning content and complete the learning activities that are provided online before you attend the scheduled learning experiences. Make sure you complete the learning activities set each week, they are designed to support your learning. Active participation in your learning will enhance your success. Ask questions when something is unclear or when you want to bring some issue to your lecturer or tutor's attention; respond to questions to test your knowledge and engage in discussion to help yourself and others learn.

#### **Consultation Sessions**

Teachers offer extra time each week to assist students outside the classroom. This is known as 'consultation time.' You may seek assistance from your teacher on email or in person according to how the teacher has explained this to the class. Attendance during consultation time is optional but you are encouraged to use this extra help to improve your learning outcomes.

## **Course Learning Materials**

Learning materials are made available to you in MyStudy on the Griffith College Portal. The learning materials are arranged in Modules. In each Module you will find Learning Content, Learning Experiences and Learning Activities. Learning Content will be engaged with prior to the scheduled Learning Experience (your weekly class). This will ensure you are prepared for the scheduled Learning Experience by being aware of the content to be covered and therefore will be able to actively participate in the session. Learning Activities are accessed after the scheduled session for purposes of review, consolidation of learning, and preparation for the Evidence of Learning tasks (assessment) in the course.

In addition, **Anytime Anywhere** learning material is provided in the course. This learning material provides support, interactive tools and directions for students who occasionally cannot attend the weekly scheduled Learning Experience (either in person or on Zoom) perhaps due to illness or other commitments. The Anytime

Anywhere learning material should also be used in conjunction with Learning Content and Learning Activities resources.

#### **Self-Directed Learning**

You will be expected to learn independently. This means you must organise and engage with the course learning content even when you are not specifically asked to do so by your teacher. The weekly guide will be helpful to organise your learning. This involves revising the weekly course learning material and completing the learning activities. It also means you will need to find additional information to evidence your learning (assessment) beyond that given to you, and to construct your own response to a question or topic. All of this requires careful planning of your time. Expect to spend, on average, at least 10 hours per week including class time for each of your courses.

## **Program Progression**

You are reminded that satisfactory Program Progression requires that attendance in classes is maintained at equal to or greater than 80%, and that GPA is maintained at equal to or greater than 3.5 [please see Griffith College Policy Library - <a href="Program Progression Policy">Program Progression Policy</a> - for more information].

#### **Teacher and Course Evaluation**

Your feedback is respected and valued by your teacher. You are encouraged to provide your thoughts on the course and teaching, both positive and critical, directly to your teacher or by completing course and lecturer evaluations via Griffith College's evaluation tool whenever these are available.

4. Learning content, learning activities and learning experiences

4.1 Modules for learning and weekly learning content, learning activities and learning experience

	Learning Content	Learning experiences	Learning activities	Evidence of learning	Learning outcome
	Module 1 HCI mod	els, theories, and frame	eworks		
1	Introduction	<ul><li>Online activities</li><li>Discussion forum</li></ul>	Weekly lesson plan activities	Weekly activities	1
2	Human factors	<ul><li>Online activities</li><li>Discussion forum</li></ul>	Weekly lesson plan activities	Weekly activities	1

3	Theoretical frameworks	<ul><li>Online activities</li><li>Discussion forum</li></ul>	Weekly	1	
	<b>Module 2</b> Designing and developing technology for different application environments				
4	Usability	<ul><li>Online activities</li><li>Discussion forum</li></ul>	Weekly	2	
5	Usability guidelines	<ul><li>Online activities</li><li>Discussion forum</li></ul>	Weekly lesson plan activities	2	
6	Design tools	<ul><li>Online activities</li><li>Discussion forum</li></ul>	Weekly     lesson plan     activities	2	
7	Design process	<ul><li>Online activities</li><li>Discussion forum</li></ul>	Weekly	2	
	Module 3 Evaluating designs				
8	Usability evaluation	<ul><li>Online activities</li><li>Discussion forum</li></ul>	Weekly lesson plan activities	3	
9	Accessibility	<ul><li>Online activities</li><li>Discussion forum</li></ul>	Weekly lesson plan activities	3	

	Module 4 Applying HCI in other domains and industry contexts				
10	Domains	<ul><li>Online activities</li><li>Discussion forum</li></ul>	Weekly lesson plan activities	Weekly activities	4
11	Emerging technology	<ul><li>Online activities</li><li>Discussion forum</li></ul>	Weekly lesson plan activities	Weekly activities	4
12	Course review	Topic review	Weekly lesson plan activities	Weekly activities	1, 2, 3, 4



# 5. Evidence of learning (Assessment plan)

## 5.1 Evidence of learning summary

	Evidence of learning	Weighting	Learning outcome	Due Date
1	Portfolio - evidence Design Portfolio Stages 1 and 2 (25% each)	50%	1, 2, 3, 4	Weeks 6, 11
2	Assignment - Written Assignment Design Work	30%	3, 4	Weeks 6, 11
3	Assignment - practical/laboratory/ clinical Design Challenge	20%	1, 2, 3, 4	Week 12

## 5.2 Evidence of learning task detail

Assessment 1: Title: Design Portfolio Type: Portfolio - evidence

Learning Outcomes Assessed: 1, 2, 3, 4

Due Date: Weeks 6 (Stage 1 25%) and 11 (Stage 2 25%)

Weight: 50% Marked out of: 100

## **Task Description:**

This trimester you will need to develop an ePortfolio of your work in Human Computer Interaction. The Design Portfolio is worth 50% of your total mark. Your Design Portfolio will include electronic evidence of your work and your professional progress. It will show your application of Human Computer Interaction concepts through the inclusion of your design work for a real world project and your personal reflections on your own progress. Your Design Portfolio will showcase your skills, not just to the teaching team, but also to potential employers. This assessment item is submitted in two parts: Stage 1 and Stage 2.

## Criteria & Marking:

Portfolio evidence will consist of progressive development of a design brief addressing a project scenario. Marks will be allocated for accuracy, level of detail, and for the portfolio being up-to-date

Your submission of your ePortfolio is weighted as follows:

- Week 6 25% (Stage 1 formal online submission)
- Week 11 25% (Stage 2 formal online submission)

You will receive feedback on your Design Portfolio after your first submission, and you will need to revise based on this feedback.

Detailed marking criteria for your Design Portfolio will be provided through the Course Site.

#### This assessment item:

- is a school based activity
- is an individual activity
- includes a self-assessment activity
- does not have a resubmission provision

#### **Assessment 2:**

Title: Design Work

**Type:** Assignment - Written Assignment **Learning Outcomes Assessed:** 3, 4

Due Date: Weeks 5 - 11

Weight: 30% Marked out of: 100

#### **Task Description:**

This trimester you will work to develop a Design Brief addressing a particular design scenario from an industry client. You will present most of your work individually through your ePortfolio, supported by weekly exercises conducted in teams within your weekly activity. Your weekly team Design Work will document your progress with supporting exercises analysing the design scenario and the people who will need to interact with your design, and the development of the designs themselves. In the future, this will help you demonstrate your HCI understanding and skills, not just to the teaching team, but also to potential employers.

## Criteria & Marking:

Full marking criteria and guides are provided on the course site.

Your finished Design Work will be submitted through the course site each week, for 30% of your mark.

Your finished Design Work will be submitted through the course site in each week, for 30% of your mark.

Submission: Submitted online through the course site

#### This assessment item:

- is a school based activity
- is a group activity
- includes a self-assessment activity
- does not have a resubmission provision

### **Assessment 3:**

Title: Design Challenge

Type: Exam - practical/laboratory/clinical Learning Outcomes Assessed: 1, 2, 3, 4

Due Date: Week 12 Weight: 20% Marked out of: 100 Duration: 120 minutes Format: Open Book Task Description:

This task is a team exercise that requires you to apply knowledge from your work over the semester to address a design challenge. The design challenge will take place in the activity during week 12.

#### Criteria & Marking:

Full criteria will be provided on the course.

The Design challenge is a workshop exercise. You will be provided with an industry scenario, and you will need to apply the material covered throughout the semester to address the scenario and produce a design for a piece of technology that would solve the scenario.

The challenge will be conducted in teams.

#### This assessment item:

- is a school based activity
- is a team activity
- does not include a self assessment activity
- does not have a re-attempt provision
- is a proctored examination

## 5.3 Late Submission

An evidence of learning (assessment) item submitted after the due date, without an approved extension from the Course Coordinator, will be penalised. The standard penalty is the reduction of the mark allocated to the assessment item by 5% of the maximum mark applicable for the assessment item, for each working day or part working day that the item is late. Evidence of learning items submitted more than five working days after the due date are awarded zero marks.

Please refer to the Griffith College website - Policy Library > <u>Assessment Policy</u> for guidelines and penalties for late submission.

## 5.4 Other Information about Evidence of Learning

### **Retention of Originals**

You must be able to produce a copy of all work submitted if so requested. Copies should be retained until after the release of final results for the course.

## Requests for extension

To apply for an extension of time for an evidence of learning item, you must submit an Application for Extension of Assignment form to your teacher at least 24 hours before the date the assignment is due. Grounds for extensions are usually: serious illness, accident, disability, bereavement or other compassionate circumstances and must be able to be substantiated with relevant documentation [e.g. Griffith College Student Medical Certificate]. Please refer to the Griffith College website - Policy Library - for guidelines regarding extensions and deferred assessment.

## **Return of Assessment Items**

- Marks awarded for in-trimester assessment items, except those being moderated externally with Griffith
  University, will be available on the Student Portal within fourteen [14] days of the due date. This does
  not apply to the final assessment item in this course (marks for this item will be provided with the final
  course result).
- Students will be advised of their final grade through the Student Portal. Students can review their exam papers after student grades have been published (see relevant Griffith College Fact Sheet for allocated times at Support> Factsheets). Review of exam papers will not be permitted after the final date to enrol.

3. Marks for **all** assessment items including the final exam (if applicable) will be recorded in the Moodle Course Site and made available to students through the Moodle Course Site.

The sum of your marks overall assessment items in this course does not necessarily imply your final grade for the course. Standard grade cut off scores can be varied for particular courses, so you need to wait for the official release of grades to be sure of your grade for this course.

#### Policies & Guidelines

Griffith College assessment-related policies can be found in the Griffith College Policy Library which include the following policies:

Assessment Policy, Special Consideration, Deferred Assessment, Alternate Exam Sittings, Medical Certificates, Academic Integrity, Finalisation of Results, Review of Marks, Moderation of Assessment, Turn-it-in Software Use. These policies can be accessed within the Policy Library

**Academic Integrity** Griffith College is committed to maintaining high academic standards to protect the value of its qualifications. Academic integrity means acting with the values of honesty, trust, fairness, respect and responsibility in learning, teaching and research. It is important for students, teachers, researchers and all staff to act in an honest way, be responsible for their actions, and show fairness in every part of their work. Academic integrity is important for an individual's and the College's reputation.

All staff and students of the College are responsible for academic integrity. As a student, you are expected to conduct your studies honestly, ethically and in accordance with accepted standards of academic conduct. Any form of academic conduct that is contrary to these standards is considered a breach of academic integrity and is unacceptable.

Some students deliberately breach academic integrity standards with intent to deceive. This conscious, premeditated form of cheating is considered to be one of the most serious forms of fraudulent academic behaviour, for which the College has zero tolerance and for which penalties, including exclusion from the College, will be applied.

However, Griffith College also recognises many students breach academic integrity standards without intent to deceive. In these cases, students may be required to undertake additional educational activities to remediate their behaviour and may also be provided appropriate advice by academic staff.

As you undertake your studies at Griffith College, your lecturers, tutors and academic advisors will provide you with guidance to understand and maintain academic integrity; however, it is also your responsibility to seek out guidance if and when you are unsure about appropriate academic conduct.

In the case of an allegation of a breach of academic integrity being made against a student he or she may request the guidance and support of a Griffith College Student Learning Advisor or Student Counsellor.

Please ensure that you are familiar with the Griffith College Academic Integrity Policy; this policy provides an overview of some of the behaviours that are considered breaches of academic integrity, as well as the penalties and processes involved when a breach is identified.

For further information please refer to the Griffith College website - Policy Library > Academic Integrity Policy

#### Reasonable Adjustments for Assessment - The Disability Services policy

The <u>Disability Services policy</u> (accessed within the <u>Policy Library</u>) outlines the principles and processes that guide the College in making reasonable adjustments to assessment for students with disabilities while maintaining academic robustness of its programs.

#### **Risk Assessment Statement**

There are no out of the ordinary risks associated with this course.

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