

# ISYS90085 Interaction Design and Usability

<b>Credit Points:</b>	12.5								
<b>Level:</b>	9 (Graduate/Postgraduate)								
<b>Dates &amp; Locations:</b>	2016, Parkville This subject commences in the following study period/s: Semester 2, Parkville - Taught on campus.								
<b>Time Commitment:</b>	Contact Hours: 36 hours, comprising of one 3 hour lecture per week Total Time Commitment: 200 hours								
<b>Prerequisites:</b>	<table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>ISYS90026 Fundamentals of Information Systems</td> <td>Semester 1</td> <td>12.50</td> </tr> </tbody> </table> <p>OR</p> <p>Permission from the subject coordinator.</p>			Subject	Study Period Commencement:	Credit Points:	ISYS90026 Fundamentals of Information Systems	Semester 1	12.50
Subject	Study Period Commencement:	Credit Points:							
ISYS90026 Fundamentals of Information Systems	Semester 1	12.50							
<b>Corequisites:</b>	None								
<b>Recommended Background Knowledge:</b>	None								
<b>Non Allowed Subjects:</b>	<table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>SINF90002 Interaction Design and Usability</td> <td>Not offered 2016</td> <td>12.50</td> </tr> </tbody> </table>			Subject	Study Period Commencement:	Credit Points:	SINF90002 Interaction Design and Usability	Not offered 2016	12.50
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SINF90002 Interaction Design and Usability	Not offered 2016	12.50							
<b>Core Participation Requirements:</b>	<p>&lt;p&gt;For the purposes of considering request for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005), and Student Support and Engagement Policy, academic requirements for this subject are articulated in the Subject Overview, Learning Outcomes, Assessment and Generic Skills sections of this entry.&lt;/p&gt; &lt;p&gt;It is University policy to take all reasonable steps to minimise the impact of disability upon academic study, and reasonable adjustments will be made to enhance a student's participation in the University's programs. Students who feel their disability may impact on meeting the requirements of this subject are encouraged to discuss this matter with a Faculty Student Adviser and Student Equity and Disability Support: &lt;a href="http://services.unimelb.edu.au/disability"&gt;http://services.unimelb.edu.au/disability&lt;/a&gt;&lt;/p&gt;</p>								
<b>Coordinator:</b>	Dr Jenny Waycott								
<b>Contact:</b>	Dr Jenny Waycott Email: <a href="mailto:jwaycott@unimelb.edu.au">jwaycott@unimelb.edu.au</a> (mailto:jwaycott@unimelb.edu.au)								
<b>Subject Overview:</b>	<p><b>AIMS</b></p> <p>Typically, 40% of IS development costs can be attributed to user interface development. Unusable systems may necessitate longer training courses, incur higher operational costs, are ineffective in supporting business processes, are error prone and even dangerous. This subject presents students with the theory, methodology and technology relevant to the development of innovative and usable interactive information systems.</p> <p><b>INDICATIVE CONTENT</b></p> <p>Aspects of the following topics will be considered:</p> <ul style="list-style-type: none"> <li># Theoretical foundations (theories of human-computer interaction, user characteristics, and user experience)</li> <li># User interfaces (e.g., mobile, web, and wearable interfaces)</li> </ul>								

	# Usability and user experience (user-centred design; user needs analysis; participatory design and usability evaluation)
<b>Learning Outcomes:</b>	<p><b>INTENDED LEARNING OUTCOMES (ILOs)</b></p> <p>Having completed this unit the student is expected to:</p> <ol style="list-style-type: none"> <li>1 Have knowledge of the technical, cognitive, and social factors that can make interactive software effective</li> <li>2 Understand the methods, benefits, and limitations of a range of user-centred design approaches</li> <li>3 Be able to apply an evidence-based approach to identify user needs and specify requirements for new interactive systems.</li> <li>4 Know how to use established techniques to plan, construct and evaluate paper and digital prototypes.</li> </ol>
<b>Assessment:</b>	<p>Critical Review - Individual students write a review (1000 words) of a prescribed academic paper and take part in a class discussion about the academic paper. The critical review is due between weeks 3 and 11, worth 10%. Approximately 13 – 15 hours of work is required. Intended Learning Outcomes (ILOs) 1 and 2 are addressed in the critical review. Assignment 1 – Cognitive Walkthrough: In small groups (3-4 students), students conduct a user needs analysis of a particular situation of use, design of a paper prototype and conduct an expert evaluation of the prototype. The assignment consists of a written report (2500-3000 words) and a presentation (10 minutes), due in week 7, worth 25%. Assignment 1 requires approximately 40 - 45 hours of work per student. ILOs 3 and 4 are addressed in this assignment. Assignment 2 - User-based Evaluation – In small groups (3-4 students) students create a digital prototype (based on the findings of assignment 1) and conduct a user-based evaluation of the prototype. Groups must report on the evaluation via a written report (2500-3000 words) and a presentation (10 minutes), due in week 12, worth 25%. Assignment 2 requires approximately 40 - 45 hours of work per student. ILOs 3 and 4 are addressed in this assignment. Assignment 2 is a hurdle and must be passed to pass the subject. Examination - One written open book take-home end of semester examination (40%). ILOs 1 and 2 are addressed in the examination. The examination is a hurdle and must be passed to pass the subject. Hurdle Requirement: To pass the subject, students must obtain: at least 50% of the marks available in Assignment 2 at least 50% of the marks available in the examination.</p>
<b>Prescribed Texts:</b>	None
<b>Breadth Options:</b>	This subject is not available as a breadth subject.
<b>Fees Information:</b>	Subject EFTSL, Level, Discipline & Census Date, <a href="http://enrolment.unimelb.edu.au/fees">http://enrolment.unimelb.edu.au/fees</a>
<b>Generic Skills:</b>	<p>On completion of this subject, students should have the following skills:</p> <ul style="list-style-type: none"> <li># Analytical and interpretative skills, from critically engaging with the core concepts and approaches in human-computer interaction and user-centred design</li> <li># High-level design skills, through proposing new uses of technology to support users</li> <li># Team-work, through working on a group project</li> <li># Report-writing skills</li> <li># Presentation skills</li> </ul>
<b>Notes:</b>	<p><b>LEARNING AND TEACHING METHODS</b></p> <p>The subject is delivered in 3-hour classes, with each class containing: lectures on theoretical concepts, class discussions, and tutorial work. Outside class students will study theory and cases through reading and continuing their group activities.</p> <p><b>INDICATIVE KEY LEARNING RESOURCES</b></p> <p>There is no prescribed text for this subject, but the content is drawn from some key resources, including: Preece, J., Rogers, Y., &amp; Sharp, H. (2015). Interaction Design: Beyond Human-Computer Interaction. A list of articles will be provided on the LMS and the lecture slides will include references to key resources. Materials from real-world cases are provided in class.</p> <p><b>CAREERS / INDUSTRY LINKS</b></p>

	This subject is relevant to careers as a usability engineer, user experience designer, interaction designer, information architect etc. Students will work on real-world user interface design cases. There will be one or two lectures from invited practitioners from industry.
<b>Related Course(s):</b>	Doctor of Philosophy - Engineering Master of Information Systems Master of Information Systems Master of Information Systems Master of Philosophy - Engineering Master of Science (Information Systems)
<b>Related Majors/Minors/ Specialisations:</b>	MIS Professional Specialisation MIS Research Specialisation MIT Spatial Specialisation