INFO 3003 HUMAN-COMPUTER INTERACTION

Credit Points 10

Legacy Code 300570

Coordinator Omar Mubin (https://directory.westernsydney.edu.au/ search/name/Omar Mubin/)

Description A key component to the discipline of Information Systems is the understanding and the advocacy 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. They must employ user centered methodologies in the development, evaluation, and deployment of IT applications and systems. This unit examines human-computer interaction in order to develop and evaluate software, websites and information systems that not only look professional but are usable, functional and accessible.

School Computer, Data & Math Sciences

Discipline Information Technology, Not Elsewhere Classified.

Student Contribution Band HECS Band 2 10cp

Check your HECS Band contribution amount via the Fees (https:// www.westernsydney.edu.au/currentstudents/current_students/fees/) page.

Level Undergraduate Level 3 subject

Equivalent Subjects INFS 3015 - Software Interface Design

Learning Outcomes

On successful completion of this subject, students should be able to:

- 1. Apply cognitive models to the design of application user interfaces.
- Indicate ways in which users' characteristics (i.e., age, education, cultural differences, disability etc.) require adaptation of a user interface to increase effectiveness.
- Integrate appropriate user-centred design methodologies into the development of an application or website and recognise advantages and disadvantages of doing so.e.
- 4. Describe major usability guidelines and standards, for e.g. ISO or Nielsen
- 5. Develop both low-fidelity and high-fidelity prototypes and produce user interfaces for domain specific applications.
- 6. Create an appropriate user evaluation plan with carefully chosen subjective and objective measures.
- 7. Discuss state of the art research issues and novel interaction technologies under the umbrella of HCI.

Subject Content

- Understanding The user and The user experience
- interaction styles
- Usability Standards
- user-centred design methods
- development tools and prototyping
- Usability testing: tools and methodologies
- Accessibility and assistive technologies
- Personalisation and trust
- Developing for multiple devices (Computer, PDAs, 3G phones etc)
- human computer interface in industry
- research Initiatives in HCI
- emerging technologies

Assessment

The following table summarises the standard assessment tasks for this subject. Please note this is a guide only. Assessment tasks are regularly updated, where there is a difference your Learning Guide takes precedence.

ltem	Length	Percent	Threshold	Individual/ Group Task
Log/ Workbook	In-class basic tutorial questions to be completed in a log book during the tutorial session. Number of questions will usually range from 3 - 5	10	Y	Individual
Log/ Workbook	In extension to class work, students will be given weekly exercises that they must be complete at home and submit at two points in the semester		Υ	Individual
Applied Project	A: 1200 words B: 1200 words in addition to a set of diagrams as part of an appendix C: 10 minutes	75	Υ	Individual

Prescribed Texts

• Barnum, C. M. (2010). Usability testing essentials: Ready, set...test. Burlington, MA: Elsevier Science

Teaching Periods

Summer A Parramatta - Victoria Rd

Day

Subject Contact Paul Bingham (https:// directory.westernsydney.edu.au/search/name/Paul Bingham/)

View timetable (https://classregistration.westernsydney.edu.au/even/ timetable/?subject_code=INFO3003_22-SUA_PS_D#subjects)

Autumn

Campbelltown

Day

Subject Contact Omar Mubin (https://directory.westernsydney.edu.au/ search/name/Omar Mubin/)

View timetable (https://classregistration.westernsydney.edu.au/even/ timetable/?subject_code=INF03003_22-AUT_CA_D#subjects)

Penrith (Kingswood)

Day

Subject Contact Omar Mubin (https://directory.westernsydney.edu.au/ search/name/Omar Mubin/)

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Parramatta - Victoria Rd

Day

Subject Contact Omar Mubin (https://directory.westernsydney.edu.au/ search/name/Omar Mubin/)

View timetable (https://classregistration.westernsydney.edu.au/even/ timetable/?subject_code=INF03003_22-AUT_PS_D#subjects)

Sydney City Campus - Term 1

Sydney City

Day

Subject Contact Antoinette Cevenini (https:// directory.westernsydney.edu.au/search/name/Antoinette Cevenini/)

View timetable (https://classregistration.westernsydney.edu.au/even/ timetable/?subject_code=INF03003_22-SC1_SC_D#subjects)

Sydney City Campus - Term 2

Sydney City

Day

Subject Contact Antoinette Cevenini (https:// directory.westernsydney.edu.au/search/name/Antoinette Cevenini/)

View timetable (https://classregistration.westernsydney.edu.au/even/ timetable/?subject_code=INF03003_22-SC2_SC_D#subjects)