

Liverpool John Moores University

Title: USABILITY ENGINEERING
Status: Definitive
Code: **6525YCOM** (118255)
Version Start Date: 01-08-2011

Owning School/Faculty: Computing and Mathematical Sciences
Teaching School/Faculty: Kolej Teknologi YPC-ITWEB

Team	Leader
David England	Y

Academic Level: FHEQ6
Credit Value: 24.00
Total Delivered Hours: 72.00
Total Learning Hours: 240
Private Study: 168

Delivery Options

Course typically offered: Standard Year Long

Component	Contact Hours
Lecture	12.000
Tutorial	24.000
Workshop	36.000

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	AS1	Group coursework: Modelling, analysis and (re-)specification of a system of their choice. Group coursework will be assessed by peer assessment.	50.0	
Report	AS2	Group coursework: Design, prototyping and evaluation of their improved system . Group coursework will be assessed by peer assessment.	50.0	

Aims

Explain the importance of a user centered design process.

Develop skills in usability specification and context of use.
Develop skills in producing high quality designs and prototypes for interactive systems.
Develop skills in the critical and systematic evaluation of interactive systems.

Learning Outcomes

After completing the module the student should be able to:

- 1 Plan and manage the user-centred design process.
- 2 Specify high-level user and organisational requirements and context of use.
- 3 Produce high quality design solutions and prototypes.
- 4 Critically evaluate designs against user requirements.

Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

System respecification	1	2
System evaluation	3	4

Outline Syllabus

What is Usability Engineering?
The Human Performance Model of Human Computer Interaction.
Usability Specification and Modeling.
Context and organisation in user centred design.
Software Development Methods and Prototyping.
Evaluation and the measurement of user experience.
Accessibility and Special Needs.
Recent advances in usability engineering and interaction technology.

Learning Activities

Lectures, group work in labs and self directed learning in analytical and modeling skills, problem-based learning workshops in design, prototyping and evaluation.

References

Course Material	Book
Author	Rogers, Y., Preece, J. and Sharp, H.
Publishing Year	2011
Title	Interaction Design, beyond human-computer interaction
Subtitle	

Edition	3rd Edition
Publisher	John Wiley & Sons
ISBN	0470665769

Course Material	Book
Author	Shneiderman, B., Plaisant, C., Cohen, M. and Jacobs, S.
Publishing Year	2009
Title	Designing the User Interface: Strategies for Effective Human-Computer Interaction
Subtitle	
Edition	5th Edition
Publisher	Addison-Wesley
ISBN	0321601483

Course Material	Book
Author	Dix, A., Finlay, J., Abowd, G. and Beale, R.
Publishing Year	2004
Title	Human-Computer Interaction
Subtitle	
Edition	3rd Edition
Publisher	Prentice Hall
ISBN	0130461091

Course Material	Book
Author	Pressman, R. S.
Publishing Year	2009
Title	Software Engineering
Subtitle	A Practitioner's Approach
Edition	6th Edition
Publisher	McGraw Hill
ISBN	9780071240833

Notes

This module covers a systematic approach to the analysis, modeling, design, implementation and evaluation of interactive systems. Students will study and practice the material via lectures and tutorials and then proceed to a problem-based approach to the design, prototyping and evaluation of a system, as appropriate to their programme of study.