

Liverpool John Moores University

Title: USABILITY ENGINEERING
Status: Definitive
Code: **6013ONLINE** (117561)
Version Start Date: 01-08-2011

Owning School/Faculty: Computing and Mathematical Sciences
Teaching School/Faculty: Computing and Mathematical Sciences

Team	Leader
David England	Y
Andrew Symons	

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	24.000
Online	24.000
Tutorial	24.000

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	AS1	Modeling, analysis and (re-)specification of a system, followed by, design, prototyping and evaluation of the improved system	100.0	

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 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 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
Subtitle	Beyond Human-Computer Interaction
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
Subtitle	Strategies for Effective Human-Computer Interaction
Edition	5th Edition
Publisher	Addison-Wesley
ISBN	0321601483

Course Material	Book
Author	Alan Dix et al
Publishing Year	2004
Title	Human-Computer Interaction
Subtitle	
Edition	3rd Edition
Publisher	Prentice Hall
ISBN	0130-461091

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

Course Material	Journal / Article
Author	
Publishing Year	
Title	Appropriate journal and conference papers from the ACM and BCS digital libraries
Subtitle	
Edition	
Publisher	
ISBN	

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. All online activities are scheduled.