



**SCHOOL OF ECONOMICS  
AND MANAGEMENT**  
Lund University

*Department of Informatics*

**STUART MCILREAVY**, date of birth: February 20, 1981,  
has within the Erasmus programme fulfilled the requirements for the course

**Human Computer Interaction - Analysis, 5 credits (7,5 ECTS credits)**  
with the grade 7 (ECTS grade C).

The course was given at Lund University during the period November 4, 2002 until January 17, 2003.  
The course is elective within the Master of Science (MSc) programme in Informatics.  
A full year corresponds to 40 credits.

**AIMS AND OBJECTIVES OF THE COURSE**

The principal goal of the course is to give the students an insight into interface design principles, tools, design and evaluation methods and techniques and methods; to train students in interface analysis, design and evaluation methods; to show the possibilities of new multimedia technologies with current computer applications.  
For this course we provide an adaptable media integration laboratory, where students experiment with different types of interaction equipment, media, software and network structures.

**COURSE CONTENTS**

Media integration and the workplace of the future, Multimedia technologies and media integration techniques and tools, Human factors and cognitive psychology, Models of human cognition and perception, Goal directed behaviour, Usability studies, User requirements in an interactive environment, Design objectives, Demands on interaction design posed by user and application profiles, User interface management methodologies, Types of user interface management systems. Agents, objects and events, Development tools, Models, and tools for design of interactions, Available technology for human-computer interaction, A taxonomy of interaction techniques, Object-oriented interaction design Windows and agents, Design methods for systems design in an interactive world, Waterfall models, Iterative methods, The project team, Rapid prototyping, mockup techniques and animations, Style guides, Methods and techniques for evaluation of interface designs, Evaluation factors and measurements, Evaluation design.

Lectures: Presenting the main points of each of the six blocks – The subject of HCI, The computer, The human, The interaction, Interface evaluation and interface analysis.

Workshops: Practical training in analysis, design and evaluation methods and techniques.

Computer labs: Exercises in media integration, interface management systems and interface animation

**REQUIRED READING**

Preece J, "Interaction Design. Beyond Human-Computer Interaction" (2001), John Wiley and Sons Ltd, ISBN 047 149278 7  
Readings on multimedia and analysis and evaluation of HCI.

**COURSE ASSESSMENT**

To pass the course the student must pass a written examination and complete the different assignments.

**Hans Lundin**  
Head of Department

