

HCI, Computers and Society

Level: **2**, CATS: **24**

Unit co-ordinator: **Rose Spilberg**

Pre-reqs: **None**

Co-reqs: **None**

Barred Combinations: **None**

Synopsis

This unit aims to develop an appreciation of the significance and scope of human factors in the development of technological systems, and to raise awareness of the range and depth of social, political, ethical and legal issues raised by technological developments in society.

The unit provides a user-centred approach to the implementation and evaluation of technological systems, introducing some of the physiological and cognitive issues relevant to human-computer interaction and user interface design, together with user-centred tools and techniques for analysing, designing, implementing and evaluating user interfaces.

The unit then goes on to consider applications of technology in society and their implications: professional, legal and ethical constraints and considerations.

Outline Syllabus

Introduction and background to HCI.

Analysis of users: physiological limitations; attention and perception; cognitive abilities; learning and learning styles.

Task analysis & task design; interface design.

Usability analysis and evaluation: research methods and techniques

Inclusiveness: access issues and policies; cultural issues and policies..

Social and legal concepts.

Privacy, data protection and access to information.

Introduction to professional ethical frameworks as the means to shape individual and collective behaviour.

Learning Outcomes

- [LO1] deploy human factors principles in the analysis and evaluation of computer systems;
- [LO2] apply user-centred practice in the analysis, and evaluation of software systems
- [LO3] judge the impact of technology on contemporary situations from multiple perspectives
- [LO4] assess the impact of legal framework and professional practice in the design and implementation of technological systems.

Teaching and Learning Strategy

This unit is taught through a programme of lectures that introduce core concepts and issues. These are explored and developed through seminars, practical workshop activities and independent study.

Assessment Strategy

Where an assessment is spread across a number of weeks, for example from Week 6 to Week 11, this is encoded as 6211 (i.e. indicating 6 “to” 11). Examinations take place at the end of the academic year. In all other cases, weeks are numbered from 1-28 (i.e. vacations are not included).

Assessment	Week	(%)	Learning Outcomes	Group Work
Assignment	8	25	[LO1]	No
Assignment	15	25	[LO2]	No
Assignment	25	25	[LO3]	No
Assignment	26	25	[LO4]	No