Module Specification

Usability and Interaction Design

Version: 2023-24, v2.0, 19 Jul 2023

Contents

Part 1: Information

Module title: Usability and Interaction Design

Module code: UFCFHC-15-3

Level: Level 6

For implementation from: 2023-24

UWE credit rating: 15

ECTS credit rating: 7.5

Faculty: Faculty of Environment & Technology

Department: FET Dept of Computer Sci & Creative Tech

Partner institutions: None

Field: Computer Science and Creative Technologies

Module type: Module

Pre-requisites: None

Excluded combinations: None

Co-requisites: None

Continuing professional development: No

Professional, statutory or regulatory body requirements: None

Part 2: Description

Overview: Not applicable

Features: Not applicable

Educational aims: See Learning Outcomes

Outline syllabus: Nature and scope of interaction design: review of the field of human-computer interaction and an overview of the range and nature of activities interaction design encompasses. The human-centred systems perspective.

Human characteristics: physiological and psychological attributes. Ergonomics. Memory. Cognition, including problem solving, reasoning and skills acquisition. Role of emotion. Culture and gender issues. Implications of limitations for interface design and development.

Usability: principles and concepts. Guidelines and standards. User-centered design process. Usability evaluation in different contexts. Evaluation techniques and frameworks. Data interpretation.

Input and output devices: traditional and emerging technologies. New and emerging interaction paradigms: ubiquitous and pervasive computing. Wearable computing. Virtual and augmented reality. Attentive environments. Tangible bits.

Interaction design: Interaction design concepts and patterns, visual information design. Affective interaction design.

Part 3: Teaching and learning methods

Teaching and learning methods: Contact time: 36 hours

Assimilation and development of knowledge: 74 hours

Exam preparation: 10 hours

Coursework preparation: 30 hours

Total study time: hours 150

There will be weekly two-hour workshop/seminar sessions. The emphasis of these will be on ensuring a deep understanding of content through practical application of concepts and methods. There will be a strong emphasis on engendering a working understanding of taking a human-centred systems perspective in design by the

careful choice of appropriate activities and case studies.

Independent learning support. Additional detail will be provided on a module web site in the form of additional tasks, readings, podcasts and videos. Opportunities will be provided to discuss current topics and issues with course colleagues and tutors in tutorial sessions and through online discussion forums. This will enable a regular dialogue between students and tutors.

Module Learning outcomes: On successful completion of this module students will achieve the following learning outcomes.

MO1 Apply user-centred design and evaluation methodologies and techniques

MO2 Compare and contrast a variety of interfaces and interaction devices in terms of their usability in different contexts

MO3 Synthesise secondary and primary research findings as part of conducting an evidence-based interaction design study

Hours to be allocated: 150

Contact hours:

Independent study/self-guided study = 114 hours

Face-to-face learning = 36 hours

Total = 150

Reading list: The reading list for this module can be accessed at readinglists.uwe.ac.uk via the following link https://uwe.rl.talis.com/index.html

Part 4: Assessment

Assessment strategy: The module is assessed by a 2 hour examination at the end of the teaching and also by coursework. The exam assesses the students' understanding of the theoretical aspects of the module. The 1 st coursework, a group assignment, allows students to apply usability evaluation techniques. The 2nd coursework requires in-depth research and analysis for an interaction design project.

Assessment tasks:

Examination (First Sit)
Description: Exam
Weighting: 25 %
Final assessment: No
Group work: No
Learning outcomes tested: MO2

Presentation (First Sit)
Description: Presentation (usability study)
Weighting: 30 %
Final assessment: No
Group work: Yes
Learning outcomes tested: MO2

Project (First Sit)
Description: Individual interaction design project
Weighting: 45 %
Final assessment: Yes
Group work: No
Learning outcomes tested: MO1, MO3

Examination (Resit)
Description: Exam
Weighting: 25 %
Final assessment: No
Group work: No
Learning outcomes tested: MO2

Presentation (Resit)
Description: Presentation (usability study)
Weighting: 30 %
Final assessment: No

Group work: Yes
Learning outcomes tested: MO2

Project (Resit)
Description: Individual interaction design project
Weighting: 45 %
Final assessment: Yes
Group work: No
Learning outcomes tested: MO1, MO3

Part 5: Contributes towards

This module contributes towards the following programmes of study:

Information Technology {Top-Up} [Frenchay] BSc (Hons) 2023-24

Information Technology {Top-Up} [SHAPE] BSc (Hons) 2023-24

Information Technology {Top-Up} [Phenikaa] BSc (Hons) 2023-24

Information Technology {Top-Up} [SHAPE] BSc (Hons) 2023-24

Information Technology {Top-Up} [Frenchay] BSc (Hons) 2022-23

Information Technology {Top-Up} [SHAPE] BSc (Hons) 2022-23

Computer Science [Sep][FT][Villa][3yrs] - Not Running BSc (Hons) 2021-22

Computer Science [May][FT][Villa][3yrs] - Not Running BSc (Hons) 2021-22

Computer Science [Jan][FT][Villa][3yrs] - Not Running BSc (Hons) 2021-22

Information Technology {Dual}[Mar][FT][Taylors][3yrs] BSc (Hons) 2021-22

Computer Science {Foundation} [Sep][FT][Frenchay][4yrs] - Not Running BSc (Hons) 2020-21

Computer Science [Sep][SW][Frenchay][4yrs] - Not Running BSc (Hons) 2020-21

Computer Science {Foundation} [Sep][SW][Frenchay][5yrs] BSc (Hons) 2019-20