Module Specification

Introduction to Human Computer Interaction

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Contents

Part 1: Information

Module title: Introduction to Human Computer Interaction

Module code: UFCFP1-30-1

Level: Level 4

For implementation from: 2023-24

UWE credit rating: 30

ECTS credit rating: 15

Faculty: Faculty of Environment & Technology

Department: FET Dept of Computer Sci & Creative Tech

Partner institutions: University Centre Weston

Delivery locations: University Centre Weston

Field: Computer Science and Creative Technologies

Module type: Standard

Pre-requisites: None

Excluded combinations: None

Co-requisites: None

Continuing professional development: No

Professional, statutory or regulatory body requirements: None

Part 2: Description

Overview: Within this module you will investigate and evaluate the interaction between the human and their digital environment; this module has a strong emphasis on the interactions between users and digital environments, but you will also explore how HCI principles can be applied to physical, non-software, environments.

Within the module you will analyse an organisation's digital interfaces, as well as the interfaces of client organisations. Human Computer Interaction (HCI) is the field of study that draws from multiple disciplines to inform the design of intuitive interfaces that have high usability and utilise established design principles. HCI has its origins in computer science and psychology, but it has evolved to encompass and acknowledge the complexity of the logical, societal, and emotional relationship between human beings and their environments. Due to the expansive nature of the HCI discipline, you will cover content that draws from the social sciences, philosophy, and organisational theories.

The module will highlight the power of human-computer interaction, and the role it plays in a digital world. Human-Computer Interaction is not solely about understanding and evaluating interactive experiences, it is also about understanding how to promote equity and accessibility through application of key design principles.

Within the module you will begin to view design from a user's perspective, developing your social psychology and empathetic skills. Understanding a user's needs allows for development of more suitable user experiences; you will apply Universal design, and key design heuristics to achieve this.

Features: Not applicable

Educational aims: You will develop an appreciation for the fundamental aspects of UX design, such as User-centred design, and the principles that underpin them.

You will develop experimental testing skills and be able to apply heuristic analysis to a wide range of contexts.

In addition, you will explore the importance of a range of qualitative and quantitative research methods into User Experience, this includes traditional HCI methods but ventures into complementary disciplines such as sociology, psychology, anthropology, and ethics of design.

Outline syllabus: Throughout this module you will have the opportunity to explore a wide range of HCI theories and practices, including:

Social Psychology, and its impact on interaction;

Need Finding techniques, methods, and best practice;

Ethics within HCI and Social Psychology;

Principles of design and HCI;

Design Heuristics and Heuristic evaluation of User Interfaces;

Promoting equity and accessibility through HCI;

Research methodology and analysis;

Applications of HCI.

Part 3: Teaching and learning methods

Teaching and learning methods: This module will introduce you to the concept of Human Computer Interaction; this will involve a combination of guided learning through both formal lectures and practical workshops that enable theory versus practice to be explored.

The initial emphasis will be on lectures to ensure knowledge development and an understanding of the psychological and sociological aspects of computing. During the latter part of the module, you will be supported to undertake research into an agreed area of interest ensuring that appropriate methodologies are in place. You will also identify and discuss the ethical implications of your approach; explore both quantitative and qualitative data; sampling techniques; before drawing conclusions all of which will be supported through academic reading.

Opportunities for formative feedback exist throughout this module include mock assessments, practice presentations and supported peer assessments to ensure

your readiness for assessments. Academic writing is also supported by the Higher Education Academic Registry Team who will run focused sessions throughout the programme.

The resit/retake assessments follow the same format as the first sit with reworked or alternative scenarios/tasks.

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

MO1 Demonstrate understanding of key theories based around human computer interaction

MO2 Demonstrate knowledge of the ethical issues based around human computer interaction

MO3 Demonstrate the application of user research methods and methodologies including qualitative and quantitative approaches.

MO4 Develop knowledge and understanding of personas and user journeys to meet organisational needs.

MO5 Communicate findings concisely and effectively in varied formats.

Hours to be allocated: 300

Contact hours:

Independent study/self-guided study = 204 hours

Face-to-face learning = 96 hours

Total = 300

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/lists/5C65726F-E03D-8778-D2A8-ECA7B040F5E2.html

Part 4: Assessment

Assessment strategy: The written assignment will be based upon a discuss ethical design, and how utilising psychological tools requires ethical applications. You will be given a project to explore and develop throughout the module you will produce a portfolio of evidence. This will include the project aims and objectives, ethical issues, research methodologies that you are utilising along with an analysis of your findings.

In the second half of the module, you will apply the previously gained knowledge to a practical situation, this will be in the form of an individual project where you are given a problem space and must create an ethical design using HCI principles. You will be given a project to explore and develop throughout the module you will produce a portfolio of evidence. This will include the project aims and objectives, ethical issues, research methodologies that you are utilising along with an analysis of your findings.

Plagiarism will be designed out due to the uniqueness of the scenarios of assignments one and two; however, software will be used to monitor assignment one for plagiarism.

Tutor-lead formative feedback will be available throughout the module, and targeted sessions lead by academic support are run through the academic year to support and provide feedback opportunities assessment layout, presentation practice and academic research.

The resit opportunities will follow the same format as the first submission, however alternative scenarios or case studies should be used.

Assessment components:

Written Assignment - Component A (First Sit)
Description: Using academic literature, you will explore the key theories of sociological and psychological concepts that affect the HCI field. You will additionally explore some of the ethical considerations within the digital user experience field (1500 words).
Weighting: 40 %
Final assessment: No

Group work: No

Learning outcomes tested: MO1, MO2, MO5

Presentation - Component B (First Sit)

Description: Presentation of Project:

You will be given a project to explore and develop throughout the module you will produce a portfolio of evidence. This will include the project aims and objectives, ethical issues, research methodologies that you are utilising along with an analysis of your findings.

Duration: 15 minutes with 5 mins questioning

Weighting: 60 %

Final assessment: Yes

Group work: No

Learning outcomes tested: MO3, MO4, MO5

Written Assignment - Component A (Resit)

Description: Using academic literature, you will explore the key theories of sociological and psychological concepts that affect the HCI field. You will additionally explore some of the ethical considerations within the digital user experience field (1500 words).

Weighting: 40 %

Final assessment: No

Group work: No

Learning outcomes tested: MO1, MO2, MO5

Presentation - Component B (Resit)

Description: Presentation of Project:

You will be given a project to explore and develop throughout the module you will produce a portfolio of evidence. This will include the project aims and objectives, ethical issues, research methodologies that you are utilising along with an analysis of your findings.

Duration: 15 minutes with 5 mins questioning

Weighting: 60 %

Final assessment: Yes

Group work: No

Learning outcomes tested: MO3, MO4, MO5

Part 5: Contributes towards

This module contributes towards the following programmes of study:

Digital User Experience (UX) BSc (Hons) 2023-24