# **COURSE SPECIFICATION DOCUMENT**

**Academic School / Department:** School of Liberal Arts

**Programme:** Computer Science

FHEQ Level: 6

Course Title: Human Computer Interaction

Course Code: DGT 6106

**Student Engagement Hours:** 160 (Standard 4- credit BA Course)

Lectures: 15
Lab: 30
Supervision: 40
Independent / Guided Learning: 75

Semester: Fall, Spring

**Credits:** 16 UK CATS credits

8 ECTS credits 4 US credits

## **Course Description:**

This course introduces students to the principles of human-computer interaction and the industry standard design methodologies. In this course, students will have the opportunity to develop a concept by studying users, storyboarding, prototyping, and evaluating the design and produce a prototype ready for implementation by a programmer.

### **Prerequisites:**

DGT 5104 Systems Analysis and Design.

## Aims and Objectives:

By the end of this course, students will have the skills necessary to take a user-centred approach to designing digital systems. Students will have experience of going through an entire design cycle from concept to an evaluated design ready to be implemented.

# **Programme Outcomes:**

COMPSC: A2, A5, A6, B1, B2 B4, B6, C2, C3, C4 and C5

A detailed list of the programme outcomes are found in the Programme Specification.

This is located at the archive maintained by Registry and found at: https://www.richmond.ac.uk/programme-and-course-specifications/

# **Learning Outcomes:**

By the end of this course, successful students should be able to:

- Understand the fundamentals of human computer interaction principles and design approaches.
- Demonstrate awareness of new platforms, interaction styles, and applications.
- Use UX principles to critically evaluate interface design.
- Demonstrate understanding of design approaches within the set context, eg. mobile app.
- Use UX approaches to design, build and test interfaces.

#### **Indicative Content:**

- What is Usability?
- Design methodologies
- Understanding users
- Idea generation
- User stories
- Storyboarding
- Prototyping
- Accessibility and Universal Design
- Computer based evaluations
- User-based evaluations

#### **Assessment:**

This course conforms to the University Assessment Norms approved at Academic Board and located at: https://www.richmond.ac.uk/university-policies/

## **Teaching Methodology:**

• Lectures, practical demonstrations and step-by-step software tutorials, class workshops, one-to-one tutorials.

#### *Indicative Text(s):*

"Interaction Design: Beyond Human-Computer Interaction" by Jennifer Preece, et. al, 5<sup>th</sup> Edition, 2019.

"Human-Computer Interaction" by Alan Dix, Janet Finlay, et al. 3rd edition, 2003

## Journals/Additional Texts

Greever, T., 2020. Articulating Design Decisions, 2nd ed. Sebastapol: O'Reilly Media.

# Web Sites

https://www.adobe.com/uk/products/xd.html https://www.storyboardthat.com/

See syllabus for complete reading list

# **Change Log for this CSD:**

Nature of Change	Date Approved & Approval Body (School or AB)	Change Actioned by Registry Services
	(30.1001 01 7.2)	