

## COURSE SPECIFICATION DOCUMENT

<b>Academic School / Department:</b>	School of Liberal Arts
<b>Programme:</b>	Computer Science
<b>FHEQ Level:</b>	6
<b>Course Title:</b>	Human Computer Interaction
<b>Course Code:</b>	DGT 6106
<b>Student Engagement Hours:</b>	160
Lectures:	15
Lab:	30
Supervision:	40
Independent / Guided Learning:	75
<b>Credits:</b>	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. 3<sup>rd</sup> 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
Revision – annual update	May 2023	