# **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

Total Hours: 160

Timetabled Hours: 45
Guided Learning Hours: 15
Independent Learning Hours: 100

**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: <a href="https://www.richmond.ac.uk/programme-and-course-specifications/">https://www.richmond.ac.uk/programme-and-course-specifications/</a>

# **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: <a href="https://www.richmond.ac.uk/university-policies/">https://www.richmond.ac.uk/university-policies/</a>

# **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<br>Registry Services |
|--------------------------|--|---|
| Revision – annual update | May 2023                                     |   |
| Total Hours Updated      | April 2024                                   |   |
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