# Module specification

**When printed this becomes an uncontrolled document. Please access the Module Directory for the most up to date version by clicking on the following link: Module directory**

| | |
|---|---|
| Module code | COM556 |
| Module title | User Experience Design (UXD) |
| Level | 5 |
| Credit value | 20 |
| Faculty | FAST |
| Module Leader | Julie Mayers |
| HECoS Code | 100736 |
| Cost Code | GACP |

## Programmes in which module to be offered

| Programme title | Is the module core or option for this programme |
|---|---|
| BSc (Hons) Computer Science | Core |
| BSc (Hons) Computer Science (with Industrial Placement) | Core |
| BSc (Hons) Computing | Core |
| BSc (Hons) Computing (with Industrial Placement) | Core |
| BSc (Hons) Applied Software Engineering | Core |

## Pre-requisites

None

## Breakdown of module hours

| | |
|---|---|
| Learning and teaching hours | 30 hrs |
| Placement tutor support | 0 hrs |
| Supervised learning e.g. practical classes, workshops | 0 hrs |
| Project supervision (level 6 projects and dissertation modules only) | 0 hrs |
| **Total active learning and teaching hours** | 30 hrs |
| Placement / work based learning | 0 hrs |
| Guided independent study | 170 hrs |
| **Module duration (total hours)** | 200 hrs |

| **For office use only** | |
|---|---|
| Initial approval date | 03/04/2019 |
| With effect from date | 01/09/2019 |

| For office use only | |
|---|---|
| Date and details of revision | 12/11/2021 template update |
| Version number | 2 |

## Module aims

This module will explore the usability aspects of user interfaces, and enable students to analysis, design and evaluate existing systems on a range of modern devices. They will also study the impact such technology has on the wider social, ethical, legal, political, economic and environmental issues. This will enable the students to create systems for emerging interactive products such as robotics, portable and wearable devices, and smart home products incorporating aspects of learnability, accessibility, usability, usefulness, and aesthetics.

## Module Learning Outcomes - at the end of this module, students will be able to:

| | |
|---|---|
| 1 | Work individually and within a team to design solutions for current computing related issues, considering the wider social, ethical, legal, political, economic and environmental impact |
| 2 | Explain the need for good UXD practice, from the perspectives of computing and cognitive psychology |
| 3 | Select appropriate communication styles, perform user modelling, task analysis and user interface design in the context of UXD |
| 4 | Employ a range of methods to evaluate the user experience, including quantitative and qualitative methods |

## Assessment

Indicative Assessment Tasks:
Students will be given 2 assessments:

1. A case study scenario, whereby students will be given an existing design to analyse and produce recommendations to improve its usability. Students will then re-design the user interface to include their recommendations. Where practical the scenario will be related/carried out in the workplace. (2,000 words)
2. A practical usability evaluation of another student's design, selected from the first assessment submissions (group work). Students will also need to consider the wider social, ethical, legal, political, economic and environmental impact. (3,000 words)

| Assessment number | Learning Outcomes to be met | Type of assessment | Weighting (%) |
|---|---|---|---|
| 1 | 2, 3 | Case Study | 70% |
| 2 | 1, 4 | Group Project | 30% |

## Derogations

None

## Learning and Teaching Strategies

Lectures, seminars, tutorials, practical classes and workshops will be used throughout this module to support students' learning and to develop the practical research skills required to perform credible usability analysis, design and evaluation.

## Indicative Syllabus Outline

1. Overview of the history and future of human-computer interaction/UX.
2. Physiological issues.
3. Social, Ethical, Political, Legal, Economic and Environmental Issues 4. Psychology and its role in UX, with an emphasis on cognitive psychology.
5. User modelling.
6. Interaction styles (touch, speech, direct manipulation and other emerging technologies etc.).
7. Use of best practice considering the wider social, ethical, legal, political, economic and environmental impact
8. Usability analysis (e.g. task analysis).
9. Usability design guidelines/standards (as informed by principles of psychology).
10. Usability evaluation methods and techniques, including laboratory and field testing.
11. Quantitative evaluation data analysis.
12. Qualitative evaluation data analysis.

## Indicative Bibliography:

Please note the essential reads and other indicative reading are subject to annual review and update.

**Essential Reads**

Preece J, Rogers Y and Sharp H (2016) Interaction Design: Beyond Human-Computer Interaction, 4th Ed, Wiley

**Other indicative reading**

Benyon, D. (2019). *Designing User Experience: A guide to HCI, UX and interaction design* (4th ed). Pearson Higher Ed.

Interaction Design Foundation (2019) *The Encyclopedia of Human-Computer Interaction* (2nd ed). URL: https://www.interaction-design.org/literature

*Spool J, Rubin D and Chisnell D* (2008) Handbook of Usability Testing: How to Plan, Design, and Conduct Effective Tests, Wiley.

*Ritter, F.E., Baxter, G.D., Churchill, E.F.* (2014) Foundations for Designing User-Centered Systems: What System Designers Need to Know about People, Springer.

## Employability skills – the Glyndŵr Graduate

Each module and programme is designed to cover core Glyndŵr Graduate Attributes with the aim that each Graduate will leave Glyndŵr having achieved key employability skills as part of their study. The following attributes will be covered within this module either through the content or as part of the assessment. The programme is designed to cover all attributes and each module may cover different areas.

**Core Attributes**
Engaged
Enterprising
Creative
Ethical

**Key Attitudes**
Commitment
Curiosity
Resilience
Confidence
Adaptability

**Practical Skillsets**
Digital Fluency
Organisation
Critical Thinking
Emotional Intelligence
Communication