



XD4004 Principles of Interaction Design

This module aims to introduce you to the field and principles of Interaction Design (IxD). You will be introduced to the philosophy, concepts and paradigms of IxD where users must take centre stage, and be the focus of the design process of any interactive system. In IxD, designers work to identify the needs, requirements, and desires of users and create systems that address these. The module will examine these issues with you through a blend of lectures, workshops, and group projects. Formative feedback will be provided to you through weekly sessions and group coaching. Marked assessment will be carried out through one group assignment.

Module Overview

In this module you will be introduced to the field of Interaction Design (IxD) and learn about its history, core methods and techniques, and core principles. The module will equip you with skills to undertake interaction design in a broad way, and you will learn about a range of methods that will help you design new interactions between people and technology. You will apply these new skills in an assignment, which will also allow you to learn basic technical skills for developing interactive media.

The module has two sessions per week, which are divided between learning about (i) IxD methods, techniques and principles and (ii) technical skills to start developing a web-based interaction design project.

The first session each week will introduce you to the basics of design processes and conceptualising interactions between people and technology, and the general principles of interaction design processes. You will get to learn about Personas, Storyboarding, Wireframes and simple ways to prototype interactive designs to realise ideas.

The second session each week will help you learn the basics for developing websites, and start to apply some of your learning about the principles of IxD in practice. Later in the module these sessions will teach you how to create narrations to help describe and communicate your design work to audiences.

The final two weeks are dedicated to reviewing the module, and independent studio time.

What will I be expected to achieve?

1. Understand the history of interaction design, and be able to explain the importance of understanding users of technology in the creation of interactive systems.
2. Demonstrate understanding of how to apply basic interaction design and evaluation techniques to understand problems, to explore design briefs and generate insights about users.
3. Acquire the technical skills needed to develop and publish useable websites following basic interaction design principles.
4. Be capable of explaining design decisions and resulting design propositions, both verbally and via appropriate visual materials.
5. Operate and work effectively in a team to produce successful projects.



XD4004 Principles of Interaction Design

What are my assignments?

There are two main components to this assignment.

Tuesday Sessions:

During the Tuesday sessions we will be focusing mainly on ideas, experimentation, investigation and research that will inform your creative process. This first phase will concentrate on gathering and analyzing information pertinent to your design aims while learning new techniques (from guest lecturers). You will be required to research and design a project to enhance the student experience at Northumbria. You will perform some basic research into this user group, and identify (1) the pain points they have with technology (2) create personas to explore potential user needs, concerns and aspirations, (3) use storyboards and personas to visually convey existing and future user experiences, (4) redesign the identified technology using basic prototyping techniques.

This part of the assignment will be the main focus from week nine onwards. There are specific sections that you need to deliver so please check the relevant section in this brief (see right of page).

Thursday Sessions

During the Thursday sessions students will work in small groups to construct a simple but functional Wordpress site. During the course of these sessions we will also discuss a variety of core principles of interaction design and related topics and then reflect on these sessions to generate content for the group website. In addition to this you will be required to make a walk-through video complete with voice over describing the structure and function of the site and how you have applied these principles. Each group member will also provide a personal profile page in which they will catalogue their personal involvement and reflections with regard to the process of building the website.

When this part of the assignment is complete we will switch focus to your mini project as described in the section above (see Tuesday sessions) and once complete your mini project will be uploaded to your group website online.

You will be assessed 50% for both significant parts of this assignment (the content of the project, and the website).

Assessment deadlines: The deadlines for all assignments will be Thursday 23rd January 2020 at 4pm.

What will I need to submit?

1. A complete WordPress website. The website should include pages that document the following exercises that you will complete as a part of your individual project:

a. Initial research conducted about the user group identified in the design brief, including existing technologies they might / might not use.

b. User personas created on the basis of your user research.

c. Storyboards and/or Scenarios that describe the existing circumstances these users find themselves in.

d. Identification of problem interactive technology to be redesigned.

e. Wireframes, paper and/or interactive prototypes of redesigned interactive technology.

f. A short 500 word reflection on what you've learned about IxD and the specific context designed for through these exercises.

2. The website should also include content relating to the areas covered in Thursday sessions e.g visual hierarchy, accessibility etc. and a profile page where each group member describes their personal role within the group and what they have learned from the project.

A Video Walkthrough (up to 5 mins) complete with accompanying voice over. The walkthrough should explain how the principles learned in the technical sessions have been incorporated into the design.

Both the group and individual assignment content should also be provided as pdf documents.



XD4004 Principles of Interaction Design

How will I be assessed?

You will be assessed on:

1. The technical robustness and visual design of the websites developed as part of the project.
2. Your level of understanding and awareness of different IxD principles, techniques and methods, and how well you can apply these in a project.
3. How well you communicate design concepts and propositions both verbally and through visual and interactive means.
4. Your ability to work effectively both in teams and individually.

The marking criteria are as follows:

1. Effective application of basic programming skills evidenced in functioning websites that adhere to web standards, usability heuristics and consistent styling.
2. The application of basic user research and interaction design methods learned throughout the project, including the appropriate selection and use of different techniques at different points in a design process.
3. The quality of your design proposals, the choice of means of communicating them and clear connections between ideas, insights and decisions made along the design process.
4. Explanation of your contribution to group projects, submitted as part of group assignment submissions.

Students aspiring for a high 2:1 will demonstrate going beyond the module content – e.g., by engaging with additional reading to understand the limitations and strengths of methods, by developing additional technical skills, or by adopting non-taught methods and techniques.

What will I be expected to read on this module?

The reading list for this module can be found at: <http://readinglists.northumbria.ac.uk>

The Encyclopaedia of Human-Computer Interaction. <https://www.interaction-design.org/literature/book/the-encyclopedia-of-human-computer-interaction-2nd-ed>

Allen, J., and Chudley, J. (2012). Smashing UX Design: Foundations for Designing Online User Experiences. London: Wiley.

Moggeridge, B. (2006). Designing Interactions. Cambridge, MA: MIT Press.

Norman, D. (2013). The design of everyday things, revised and expanded edition. Cambridge, MA: MIT Press.

Preece, J. et al. (2015). Interaction Design. 4th Edition. New York, NY: John Wiley & Sons.



XD4004 Principles of Interaction Design

What is my schedule?

All Thursday sessions are with Trev

Session 1 (Tues): 10.00am – 1.00pm (Trev + guest lecturers)

Session 2: (Thurs): 2.00pm – 5.00pm (Trevor Sewell)

Week 1

Session 1: Introduction to Module (Trev)
Session 2: Basics of WordPress (1)

Week 2

Session 1: What is a design process?(Trev)
Session 2: Basics of WordPress (2)

Week 3

Session 1: Personas (Trev)
Session 2: Web Design Standards (1)

Week 4

Session 1: Methods (Trev)
Session 2: Web Design Standards (1)

Week 5

Session 1: with Rachel Clarke Storyboards and Scenario
Session 2: Web Design Standards (2)

Week 6

Session 1: with Rachel Clarke Storyboards and Scenario
Session 2: Making Walkthroughs

Week 7

Session 1: Enhancement Week - no session
Session 2: Enhancement Week - no session

Session 1: Mocking up and Cardboard Prototypes
Session 2: Induction and Introduction to the Sound Studio

Week 8

Session 1: with Daniel Harrison Wireframes and Interactive Mockups
Session 2: Creating audio narration
Module Project Kick-off

Week 9

Session 1: With Daniel Harrison Wireframes and Interactive Mockups
2: Technical sessions review

Week 10

Session 1: with Tommy Dylan Mocking up and Cardboard Prototypes
Session 2: Group Project Tutorials - Technical

Week 11

Session 1:with Tommy DylanMocking up and Cardboard Prototypes
Session 2: Group Project Tutorials - Technical

Week 12

Session 1: With Trev Group Project Tutorials - Methods
Session 2: With Trev Group Project Tutorials - Technical

20th January 2020 – Presentation of group assignment
23rd January 2020 – Assignment hand in