WM9N1-15 Design of Digitally Enabled Healthcare Systems

24/25

Department
> WMG

Level
> Taught Postgraduate Level

Module leader
> Mohannad Alajlani

Credit value
> 15

Module duration
> 4 weeks

Assessment
> 100% coursework

Study location
> University of Warwick main campus, Coventry

Description

Introductory description

This module focuses on the design of healthcare systems and illustrates how technology could improve these systems. It covers various design techniques/methods that are applicable to healthcare settings and explores the patterns and process behind wireframing digital health applications. This will provide an insight into the latest developments in human-centred design and consumer health, drawing on in-depth case studies and expert perspectives, underpinned by relevant theory and literature

Module aims

This module focusses on the human, socio-technical & organisational factors that need to be considered when designing and developing usable and effective healthcare systems. It draws on many fields including human factors, science of behavioural change and digital systems development.

Outline syllabus

This is an indicative module outline only to give an indication of the sort of topics that may be

covered. Actual sessions held may differ.

- Principals of design
- Principles of user centred design
- Health systems architectural design
- Modelling methods/methodologies (e.g. UML)

Learning outcomes

By the end of the module, students should be able to:

- Appraise the organisational and human factor challenges to effective use of health information systems and technologies
- Critically evaluate the role and value of user-centred design in producing digital health tools and services that are fit for purpose and value for money
- Critically appraise the methods and techniques for requirements gathering, design, and user-centred evaluation and testing for health systems and technologies
- Assess the value of clinical input, knowledge, workflow and impact when proposing digital healthcare solutions and interventions
- Evaluate the contributions that usability, accessibility and design make to the development of digital health solutions

Indicative reading list

tbc

Subject specific skills

- Design a digital healthcare system using various methods/methodologies (e.g.UML)
- Identify the socio-technical and organisational factors that need to be considered
- Use different approaches to collect users requirements
- Illustrate the workflow and impact when proposing digital healthcare solutions

Transferable skills

- Use modelling methodologies to illustrate the processes in a system.
- Identify organisational factors that could affect a design of a system
- Gather user requirements to design a digital system

Study

Study time

Type	Required
Seminars	30 sessions of 1 hour (20%)
Private study	60 hours (40%)
Assessment	60 hours (40%)
Total	150 hours

Private study description

Guided and supported trigger activities

Costs

No further costs have been identified for this module.

Assessment

You must pass all assessment components to pass the module.

Assessment group A

	Weighting	Study time
Preparation of a poster	50%	30 hours
TBC	50%	30 hours

Feedback on assessment

written feedback

Availability

There is currently no information about the courses for which this module is core or optional.