



## **Module Specification**

### **Innovative Technology in Healthcare**

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## Part 1: Information

**Module title:** Innovative Technology in Healthcare

**Module code:** USSJLF-30-M

**Level:** Level 7

**For implementation from:** 2020-21

**UWE credit rating:** 30

**ECTS credit rating:** 15

**College:** Faculty of Health & Applied Sciences

**School:** HAS Dept of Applied Sciences

**Partner institutions:** None

**Field:** Applied Sciences

**Module type:** Standard

**Pre-requisites:** None

**Excluded combinations:** None

**Co-requisites:** None

**Continuing professional development:** Yes

**Professional, statutory or regulatory body requirements:** None

## Part 2: Description

**Overview:** This module will provide the platform to introduce the Healthcare landscape and care pathways underpinned by the regulatory bodies and frameworks. The module will enable the student to understand the boundaries that guide the development on new Healthcare Technologies such as digital diagnostic and monitoring systems, and assistive and medical robots. It will also introduce the role of small-medium enterprise (SMEs) and multinationals in realising innovation in Healthcare. This module will be delivered over two semesters through a series of

lectures, tutorials and practical classes. By the end of the module the students will be able to have a detailed knowledge of the Healthcare landscape, regulatory frameworks and how new innovative technology has to be designed in a manner that considers human factors (engineering and psychological).

**Features:** Not applicable

**Educational aims:** This module aims to provide the platform to introduce the Healthcare landscape and care pathways underpinned by the regulatory bodies and frameworks.

**Outline syllabus:** •The Healthcare landscape and care pathways

- The role of multinationals and SMEs in Healthcare innovation
- Innovative Technologies for Healthcare
- Design, prototyping and adoption
- Communicating Technology
- Robotics in Healthcare

### **Part 3: Teaching and learning methods**

**Teaching and learning methods:** Lectures: This module will be delivered in integrated topic sections, where each section will provide the core knowledge that describes current regulatory frameworks.

Tutorials: These lectures will be followed by a series of tutorials that support collaborative, interactive discussion, which will help inform and prepare for assessment. They are open to covering support material from research-based material to case studies. This approach ensures an applied delivery and opportunity to build as individuals.

Practical classes: Several classes will be included that are linked to the lecture series offering the students an applied understanding of each topic section.

**Module Learning outcomes:** On successful completion of this module students will achieve the following learning outcomes.

**MO1** Evaluate how the regulatory frameworks govern the Healthcare landscape and apply these regulations to the development of new technologies (Component B1).

**MO2** Critically evaluate the role of regulatory frameworks with respect to the development of new and innovative technologies (Component B2).

**MO3** Critically evaluate how business and technology are integrated (B2).

**MO4** Write informed reports with a focus on the critical analysis of current and future regulatory frameworks (Component B1 and B2)

**MO5** Articulate key scientific concepts in a concise format (Component A)

**Hours to be allocated:** 300

**Contact hours:**

Independent study/self-guided study = 228 hours

Face-to-face learning = 72 hours

**Reading list:** The reading list for this module can be accessed at [readinglists.uwe.ac.uk](https://rl.talis.com/3/uwe/lists/7E01082F-6B34-56A7-AD77-6FC73A5CF651.html) via the following link <https://rl.talis.com/3/uwe/lists/7E01082F-6B34-56A7-AD77-6FC73A5CF651.html>

## Part 4: Assessment

**Assessment strategy:** There are three pieces of assessment: media clip with critical questioning (Component A) and two written reports (Component B, two case study-based reports). Formative feedback is provided through tutorial classes, where students will benefit from peer-peer learning.

**COMPONENT A:** The final piece of assessment will test the students understanding of how regulatory frameworks are important to the design, development and adoption of new technology. Here, using a media clip assessment (10 minutes) they will need to communicate how a product operates and articulate the regulatory frameworks that were required to design such a product. The media clip was chosen to develop student confidence when presenting and also develop their ability to

scientifically converse.

COMPONENT B1: For case study 1 (1500 words) will assess core knowledge of the regulatory frameworks that govern existing technologies related to the Healthcare landscape.

COMPONENT B2: For case study 2 (1500), students will build on the knowledge obtained from the first case study and demonstrate how regulatory frameworks can be applied to new and innovative technologies.

**Assessment tasks:**

**Presentation - Component A (First Sit)**

Description: Presentation of Media Clip (10 minutes)

Weighting: 40 %

Final assessment: Yes

Group work: No

Learning outcomes tested: MO5

**Case Study - Component B (First Sit)**

Description: Case study 1 (1500 words)

Weighting: 30 %

Final assessment: No

Group work: No

Learning outcomes tested: MO1

**Case Study - Component B (First Sit)**

Description: Case study 2 (1500 words)

Weighting: 30 %

Final assessment: No

Group work: No

Learning outcomes tested: MO2, MO3, MO4

**Presentation - Component A (Resit)**

Description: Media Clip (10 mins)

Weighting: 40 %

Final assessment: Yes

Group work: No

Learning outcomes tested: MO5

**Case Study - Component B (Resit)**

Description: case study (1500 words)

Weighting: 30 %

Final assessment: No

Group work: No

Learning outcomes tested: MO1

**Case Study - Component B (Resit)**

Description: Case study (1500 words)

Weighting: 30 %

Final assessment: No

Group work: No

Learning outcomes tested: MO2, MO3, MO4

**Part 5: Contributes towards**

This module contributes towards the following programmes of study:

Health Technology [Sep][FT][Frenchay][1yr] MSc 2020-21

Health Technology [Sep][PT][Frenchay][2yrs] MSc 2020-21