

# **Module Specification**

## **Blood Science**

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#### **Part 1: Information**

Module title: Blood Science

Module code: USSJXU-15-2

Level: Level 5

For implementation from: 2025-26

**UWE credit rating: 15** 

ECTS credit rating: 7.5

College: College of Health, Science & Society

School: CHSS School of Applied Sciences

Partner institutions: None

Field: Applied Sciences

Module type: Module

**Pre-requisites:** Infection and Disease 2025-26

Excluded combinations: None

Co-requisites: None

Continuing professional development: No

Professional, statutory or regulatory body requirements: None

## **Part 2: Description**

**Overview:** This module links two of the core biomedical science disciplines (haematology and clinical biochemistry) integrating them within selected disorders from a pathophysiological perspective through to diagnosis and monitoring.

Pre-requisites: Students must have passed USSKA7-30-1 Infection and Disease before starting this module.

Features: Not applicable

**Educational aims:** This module is designed to give an interconnected view of two core subjects in Biomedical Science, Haematology and Clinical Biochemistry. In clinical practice these disciplines work closely together, therefore this module aims to give students opportunity to connect pathophysiology and technologies used to detect and monitor disorders within both of these core subjects.

#### Outline syllabus: 1. Nutritional and Metabolic Disorders:

This section of the module will introduce disorders with a haematological/biochemical basis, such as diabetes and disorders of iron. This will also be complemented by exploration of other aspects such as healthy ageing, and how this process can alter normal haematological and biochemical profiles.

#### 2.Genetic Disorders:

Disorders with a genetic predisposition leading to altered haematological or biochemical profiles will be explored, such as red cell disorders and inborn errors of metabolism.

#### 3. Technology within Blood Science

A focus on some of the technologies employed within Biomedical Science, using specific examples in haematology and clinical biochemistry, will enable students to explore how disorders can be detected and monitored. This will include point-of-care testing, alongside other more traditional clinical technologies.

## Part 3: Teaching and learning methods

**Teaching and learning methods:** The module will be delivered via a combination of interactive lectures and linked practical classes facilitated by academics with expertise in haematology and clinical biochemistry, encouraging students to link these two core disciplines. Each area outlined in the syllabus will be delivered in discrete sections, introduced initially by underpinning interactive lectures. Each section of the module will culminate in a practical, designed to allow students to apply the underpinning theory from lectures.

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

Student and Academic Services

Module Specification

**MO1** Effectively communicate the pathophysiology of various disorders covered

in the syllabus, including how the disciplines of haematology and clinical

biochemistry link together within these disorders.

MO2 Interpret haematological and biochemical data in the investigation and

monitoring of disorders within blood science, explaining biomedical techniques

that can be used for detection/monitoring of these disorders, including point-of-

care testing.

Hours to be allocated: 150

**Contact hours:** 

Independent study/self-guided study = 114 hours

Face-to-face learning = 36 hours

Reading list: The reading list for this module can be accessed at

readinglists.uwe.ac.uk via the following link https://uwe.rl.talis.com/modules/ussjxu-

15-2.html

Part 4: Assessment

**Assessment strategy:** Assessment: Presentation (10 minutes)

The assessment is a presentation, focusing on techniques used within blood science

to diagnose and monitor disorders. Students will be given a choice of relevant blood

science areas to focus on. Students will be supported by key skills development

(communication, presentation and software) sessions alongside supporting theory,

giving opportunity to showcase their ability to present blood science-based

knowledge, whilst also giving them ownership of the topic they wish to focus on. This

will aim to provide a stepping stone for future assessed oral presentations and

enhancing key employability skills.

Assessment tasks:

**Presentation** (First Sit)

Description: Presentation (10 minutes)

Weighting: 100 %

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Group work: No

Learning outcomes tested: MO1, MO2

**Presentation** (Resit)

Description: Presentation (10 minutes)

Weighting: 100 %

Final assessment: Yes

Group work: No

Learning outcomes tested: MO1, MO2

## Part 5: Contributes towards

This module contributes towards the following programmes of study:

Biomedical Science [Frenchay] BSc (Hons) 2023-24

Biomedical Science (Foundation) [Frenchay] BSc (Hons) 2023-24

Biomedical Science [Frenchay] MSci 2023-24

Biomedical Science (Foundation) [Frenchay] MSci 2023-24

Biomedical Science [Frenchay] - Withdrawn MSci 2024-25

Biomedical Science [Frenchay] BSc (Hons) 2024-25

Biomedical Science [Frenchay] BSc (Hons) 2024-25

Biomedical Science [Frenchay] BSc (Hons) 2022-23

Biomedical Science [Frenchay] MSci 2022-23