Module Specification

Human Health and Disease

Version: 2025-26, v4.0, Approved

Contents

Part 1: Information

Module title: Human Health and Disease

Module code: USSKAN-30-2

Level: Level 5

For implementation from: 2025-26

UWE credit rating: 30

ECTS credit rating: 15

College: College of Health, Science & Society

School: CHSS School of Applied Sciences

Partner institutions: None

Field: Applied Sciences

Module type: Module

Pre-requisites: Human Anatomy and Physiology 2025-26

Excluded combinations: None

Co-requisites: None

Continuing professional development: No

Professional, statutory or regulatory body requirements: None

Part 2: Description

Overview: Human Health and Disease aims to introduce key concepts about how the human body can transition from a healthy to a disease state, and the underlying biochemical and molecular processes involved.

Pre-requisite: Students must have passed USSKA3-30-1: Human Anatomy and Physiology before starting this module.

Features: Not applicable

Educational aims: This modules aims to give learners the knowledge to discuss the causes and consequences of human disease, and equips them with the practical skills to investigate and diagnose a range of pathologies.

Outline syllabus: In this module learners will cover:
Immunology: inflammatory disorders, autoimmune disorders and disease states, immunodeficiency (including AIDS).
Haematology: the haematology of normal and disease states including haemoglobinopathies, thalassaemias, anaemias, leukaemias and thrombosis.
Microbiology: sexually transmitted infection, healthcare associated infections and the role of the gut microflora in health and disease.
Inherited conditions: disease states caused by autosomal, allosomal, mitochondrial and polygenic disorders.
Clinical biochemistry: the role of laboratory markers in the diagnosis, prevention and treatment of chronic human disease including those of the renal and endocrine systems.
Cellular pathology and oncology: an overview of the pathogenesis and significance of the most common neoplasias including breast, prostate and colon cancers.

Part 3: Teaching and learning methods

Teaching and learning methods: The module will be delivered as lectures and practical class sessions, as well as a formative essay session. Students will get a rounded experience of key laboratory skills for human health and disease and the underpinning theories to prepare them for further study.

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

MO1 Evidence advanced research and writing skills for communication of argument to a scientific audience.

MO2 Demonstrate understanding of how abnormal function of human organ systems contributes to human disease.

MO3 Apply knowledge from the published research literature to demonstrate an understanding of the transition from a healthy to diseased state.

MO4 Analyse, record and appropriately present data derived from laboratory study.

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 via the following link https://uwe.rl.talis.com/modules/usskan-30-2.html

Part 4: Assessment

Assessment strategy: Assessment 1: Written Assignment (1500 words maximum). A written account of a contemporary topic concerning the transition from healthy to disease states. This assessment will provide a valuable learning experience through applying knowledge and supporting this through the published literature. Formative support is provided through academic oversight of a draft essay plan for each student in advance of the final submission.

Assessment 2: Laboratory Report (1000 words maximum)
A contemporaneous laboratory record, which students will be required to complete and maintain as they work through the practical programme. This will require data collection, handling and interpretation, experimental planning and the application of learning from the lecture material in experimental design in addition to discussion of results. The ability to maintain an accurate laboratory record is a fundamental skill for biological scientists. Formative support is provided within each of the practical sessions, whereby students are encouraged to discuss their thoughts with staff and demonstrators.

Assessment tasks:

Written Assignment (First Sit)
Description: 1500 word report
Weighting: 50 %
Final assessment: No
Group work: No
Learning outcomes tested: MO1, MO3

Laboratory Report (First Sit)
Description: Laboratory report (approx. 1000 words)
Weighting: 50 %
Final assessment: Yes
Group work: No
Learning outcomes tested: MO2, MO4

Written Assignment (Resit)
Description: 1500 word report
Weighting: 50 %
Final assessment: No
Group work: No
Learning outcomes tested: MO1, MO3

Laboratory Report (Resit)
Description: Laboratory report (approx. 1000 words)
Weighting: 50 %
Final assessment: Yes
Group work: No
Learning outcomes tested: MO2, MO4

Part 5: Contributes towards

This module contributes towards the following programmes of study:

Biological Sciences {Foundation} [Frenchay] BSc (Hons) 2023-24

Biological Sciences {Foundation} [Frenchay] MSci 2023-24

Biological Sciences [Frenchay] BSc (Hons) 2024-25

Biological Sciences [Frenchay] - WITHDRAWN MSci 2024-25