Module Specification

Anatomy and Physiology

Version: 2020-21, v2.0, 15 Jun 2021

Contents

Part 1: Information

Module title: Anatomy and Physiology

Module code: USSJT8-30-1

Level: Level 4

For implementation from: 2020-21

UWE credit rating: 30

ECTS credit rating: 15

Faculty: Faculty of Health & Applied Sciences

Department: HAS Dept of Applied Sciences

Partner institutions: None

Delivery locations: Frenchay Campus, University Centre Weston

Field: Applied Sciences

Module type: Standard

Pre-requisites: None

Excluded combinations: None

Co-requisites: None

Continuing professional development: No

Professional, statutory or regulatory body requirements: None

Part 2: Description

Overview: Not applicable

Features: Not applicable

Educational aims: This module provides the learner with essential knowledge and understanding of the anatomy and physiology of the human body.

Outline syllabus: The syllabus includes:

Anatomical terminology, cross sectional anatomy & histology

Cells to systems, homeostasis and an introduction to the skeletal system

Muscle structure and function, and major muscle groups

The brain and nervous system

Nerves and synapses

Cardiovascular system & blood pressure

Respiratory system and pressure and ventilation

Human development & reproductive systems

Renal & urinary anatomy and physiology

Gastrointestinal and hepatobiliary

Endocrinology

Sensory & Sleep Physiology

Part 3: Teaching and learning methods

Teaching and learning methods: There will be 3 weeks of contact time at UWE in 3 x 1 week blocks. Included in each block week are laboratory workshops, lectures and tutorials. The contact time will equate to approximately 12 hours per block (a

total of 36 hours).

In addition to the allocated hours on campus learning, students will engage in synchronous and asynchronous online learning. This will comprise a total of approximately 36 hours of online engagement through a combination of lectures, synchronous online tutorials, synchronous and asynchronous discussions, online quizzes, and collaborative group work.

Theoretical material within the module will be presented to the students in the form of regular lectures throughout each of the semesters in the academic year. During those times of work based learning, these lectures will be delivered online and involve a number of technological enhancements. The learning of lecture content will be reinforced through time spent in independent learning by the directed reading of recommended texts and through the use of technology enhanced learning resources that will be provided online. This online learning and engagement will be delivered through several avenues: • Synchronous online tutorials in protected learning time where the student will contribute/attend an online activity appropriate to the content at the time at which the academic will be present online to facilitate and lead this scheduled/timetabled session. This tutorial will be themed/planned.

• Asynchronous discussions in the student's own time (or during protected time where permitted and appropriate) where they will engage/collaborate with other students on the course or in specified groups, and in which the academic is permitted to moderate where necessary, but is not expected to contribute.

• Synchronous surgery sessions timetabled for a specific time in which the academic will be available online to answer live questions via discussion boards/blogs/collaborate or to respond to questions posted/asked prior to the session.

• Interactive, online formative quizzes made available either following a particular package of knowledge exchange/learning, or in specified sessions/time periods.

• Lectures delivered online through a combination of one or more of the following: visual/audio/interactivity/personal formative assessment

A number of relevant practical sessions will be incorporated during the campus based blocks in addition to the work based learning that must be achieved under supervision by a workplace supervisor. Practical sessions will both drive hands on learning and the acquisition of technical skills at both an individual and group working level.

The remainder of the independent learning time allocated to the module should be spent preparing written assessments for submission [B1, B2], and undertaking revision for the exams [A1, A2].

Scheduled learning includes lectures, seminars, tutorials, project supervision, demonstration, practical classes and workshops; fieldwork; external visits; work based learning; supervised time in studio/workshop.

Independent learning includes hours engaged with essential reading, case study preparation, assignment preparation and completion etc. These sessions constitute an average time per level as indicated in the table below. Scheduled sessions may vary slightly depending on the module choices you make.

Module Learning outcomes:

MO1 Use and understand basic anatomical terminology

MO2 Explain the principles of homeostasis and recognise homeostatic control mechanisms

MO3 Describe the different tissue types at the cellular and tissues levels

MO4 Identify major bones of the human skeleton, and their function

MO5 To be able to relate the position, orientation, and gross anatomy of major organs to their respective systems

MO6 To understand the structure and physiological function of key core systems, such as respiratory, cardiovascular, endocrine, reproductive, gastrointestinal, neurological, renal, hepatic

MO7 Demonstrate practical skills in data observation, collection, handling and report writing

MO8 Demonstrate a broad knowledge of anatomy and physiology and be able to apply that knowledge to clinically relevant scenarios

MO9 Understand and discuss the histological differences of key systems

Hours to be allocated: 300

Contact hours:

Independent study/self-guided study = 228 hours

Face-to-face learning = 72 hours

Total = 300

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/index.html

Part 4: Assessment

Assessment strategy: The Assessment Strategy has been designed to support and enhance the development of both subject-based and more general skills, whilst

ensuring that the modules learning outcomes are attained, as described below.

Component A

The online exams will provide students with an opportunity to demonstrate both their knowledge on a broad range of topics through a series of multiple choice and short answer questions as appropriate.

Component B

The ability of the students to write scientifically and analyse data will be assessed under the first element in the form of a practical report. Feedback will be provided.

The second element is an integrated assignment, designed to test the students' ability to critically discuss a scientific topic.

Formative feedback is available to students throughout the module through group discussions, and in workshops. Students are provided with formative feed-forward for their exam through a revision and exam preparation session prior to the exam and through the extensive support materials supplied through Blackboard.

All work is marked in line with the Department's Generic Assessment Criteria and conforms to university policies for the setting, collection, marking and return of student work. Where an individual piece of work has specific assessment criteria, this is supplied to the students when the work is set.

This assessment strategy has been designed following best practice on effective assessment from JISC and The Open University's Centre for Excellence in Teaching and Learning.

Technical design and deployment of the activities will also follow best practice developed at UWE by the Education Innovation Centre in collaboration with academic colleagues across the university.

Assessment components:

Set Exercise - Component B (First Sit)
Description: Integrated assignment
Weighting: 30 %
Final assessment: No
Group work: No
Learning outcomes tested: MO1, MO2, MO3, MO4, MO5, MO6, MO7, MO8, MO9

Report - Component B (First Sit)
Description: Practical report
Weighting: 30 %
Final assessment: No
Group work: No
Learning outcomes tested: MO1, MO2, MO3, MO4, MO5, MO6, MO7, MO8, MO9

Examination (Online) - Component A (First Sit)
Description: Online Examination (72 hours)
Weighting: 20 %
Final assessment: Yes
Group work: No
Learning outcomes tested: MO2, MO3, MO4, MO5, MO6, MO8, MO9

Examination (Online) - Component A (First Sit)
Description: Online Examination (48 hours)
Weighting: 20 %
Final assessment: No
Group work: No
Learning outcomes tested: MO1, MO2, MO3, MO4, MO5, MO6, MO8, MO9

Set Exercise - Component B (Resit)
Description: Integrated assignment
Weighting: 30 %
Final assessment: No

Group work: No
Learning outcomes tested:

Report - Component B (Resit)
Description: Practical report
Weighting: 30 %
Final assessment: No
Group work: No
Learning outcomes tested:

Examination - Component A (Resit)
Description: Examination (3 hours)
Weighting: 40 %
Final assessment: Yes
Group work: No
Learning outcomes tested:

Part 5: Contributes towards

This module contributes towards the following programmes of study:

Healthcare Science (Radiation Engineering) {Apprenticeship-UWE}[Sep]FT][Frenchay][3yrs] BSc (Hons) 2020-21

Healthcare Science (Rehabilitation Engineering) {Apprenticeship-UWE}[Sep]FT][Frenchay][3yrs] BSc (Hons) 2020-21

Healthcare Science (Rehabilitation Engineering) {Apprenticeship-UWE}[Sep]FT][Frenchay][3yrs] BSc (Hons) 2020-21

Healthcare Science (Renal Technology) {Apprenticeship-UWE}[Sep]FT][Frenchay][3yrs] BSc (Hons) 2020-21

Healthcare Science (Radiotherapy Physics) {Apprenticeship-UWE}[Sep][FT][Frenchay][3yrs] BSc (Hons) 2020-21

Healthcare Science (Nuclear Medicine) {Apprenticeship-UWE}
[Sep][FT][Frenchay][3yrs] BSc (Hons) 2020-21

Healthcare Science (Radiation Physics) {Apprenticeship-UWE}
[Sep][FT][Frenchay][3yrs] BSc (Hons) 2020-21