

University of the West of Scotland

Module Descriptor

Session: 2022/23

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Status: Published

Title of Module: Human Biology

Code: BIOL08003	SCQF Level: 8 (Scottish Credit and Qualifications Framework)	Credit Points: 20	ECTS: 10 (European Credit Transfer Scheme)
School:	School of Health and Life Sciences		
Module Co-ordinator:	Fiona Menzies		

Summary of Module

Builds upon level 7 provision which introduced the general organization of the body and the concept of homeostasis. The major organ systems are introduced and their control via hormonal and neural inputs discussed. Pathological conditions that affect these organ systems will be presented to underpin this material.

Principal endocrine organs/tissues will be discussed with specific consideration to role of homeostasis and its disturbance in pathology. The anatomy of the reproductive systems will be introduced, and hormonal control of these systems presented in the context of the reproductive cycle and conception and then extended to fetal development and parturition. Functional anatomy of the CVS will be developed further to consider the conducting system of the heart, including discussion of ECG. The cardiac cycle will be presented. Blood vessel structure will be discussed specifically with reference to the functional classification of the different vessel types. Cell growth and the molecular changes associated with the neoplastic process will be presented. The concept of programmed cell death will be introduced. The general arrangement of the nervous system will be introduced. Action potential generation/propagation and structure and function of the special senses will be presented. Structure and function of skeletal, cardiac and smooth muscle will be described.

This module will work to develop a number of the key '**I am UWS' Graduate Attributes** to make those who complete this module:

Universal

- Critical Thinker
- Ethically-minded
- Research-minded

Work Ready

- Knowledgeable
- Effective Communicator
- Ambitious

Successful

- Autonomous
- Resilient
- Driven

Module Delivery Method

Face-To-Face	Blended	Fully Online	HybridC	HybridO	Work-based Learning
			✓		

Face-To-Face

Term used to describe the traditional classroom environment where the students and the lecturer meet synchronously in the same room for the whole provision.

Blended

A mode of delivery of a module or a programme that involves online and face-to-face delivery of learning, teaching and assessment activities, student support and feedback. A programme may be considered "blended" if it includes a combination of face-to-face, online and blended modules. If an online programme has any compulsory face-to-face and campus elements it must be described as blended with clearly articulated delivery information to manage student expectations

Fully Online

Instruction that is solely delivered by web-based or internet-based technologies. This term is used to describe the previously used terms distance learning and e learning.

HybridC

Online with mandatory face-to-face learning on Campus

HybridO

Online with optional face-to-face learning on Campus

Work-based Learning

Learning activities where the main location for the learning experience is in the workplace

Campus(es) for Module Delivery

The module will **normally** be offered on the following campuses / or by Distance/Online Learning: (Provided viable student numbers permit)

Paisley:	Ayr:	Dumfries:	Lanarkshire:	London:	Distance/Online Learning:	Other:
			✓			

Term(s) for Module Delivery

(Provided viable student numbers permit).

Term 1	Term 2	Term 3
	✓	

Learning Outcomes: (maximum of 5 statements)

On successful completion of this module the student will be able to:

L1. Describe the major endocrine systems, their control by homeostasis and the effect of their hormones on target organs.

L2. Describe the anatomy, hormonal control of the male and female reproductive systems and their role in conception and foetal development.

L3. Describe the structure and function of the CNS, special senses and muscle.

L4. Describe the major components of the CVS, the conducting system, cardiac cycle, blood vessel types and blood.

L5. Describe changes in cellular function in neoplasia.

Employability Skills and Personal Development Planning (PDP) Skills

SCQF Headings	During completion of this module, there will be an opportunity to achieve core skills in:
Knowledge and Understanding (K and U)	SCQF Level 8. Demonstrate a broad knowledge of major physiological systems in humans, including the principles and concepts of homeostasis and its role in control of physiological processes.

Practice: Applied Knowledge and Understanding	SCQF Level 8. Trained to apply skills and techniques important in monitoring basic and routine physiological parameters e.g. blood pressure, hormone levels, ECG, and introductory histology.
Generic Cognitive skills	SCQF Level 8. Undertake critical analysis, evaluation, of ideas and concepts. Analysing data from; immunological assays and interpreting information based on known endocrinological responses, CVS and respiratory monitoring and histology sections.
Communication, ICT and Numeracy Skills	SCQF Level 8. Data analysis and tabular/graphical presentation of data for production of word processor produced laboratory reports.
Autonomy, Accountability and Working with others	SCQF Level 8. Co-operate in sharing laboratory equipment and resources. Learn to work both individually and in pairs depending on exercise. Take responsibility for generating data for use in reports.

Pre-requisites:	Before undertaking this module the student should have undertaken the following:	
	Module Code: BIOL07023 BIOL07022	Module Title: Fundamentals of Life Chemistry for Bioscientists
	Other:	
Co-requisites	Module Code:	Module Title:

* Indicates that module descriptor is not published.

Learning and Teaching	
The learning activities undertaken to achieve the module learning outcomes will include interactive lectures and tutorials, laboratory demonstrations and activities, consideration of case studies and independent study. VLE-based support materials will be available.	
Learning Activities During completion of this module, the learning activities undertaken to achieve the module learning outcomes are stated below:	Student Learning Hours (Normally totalling 200 hours): (Note: Learning hours include both contact hours and hours spent on other learning activities)
Lecture/Core Content Delivery	20
Laboratory/Practical Demonstration/Workshop	6
Tutorial/Synchronous Support Activity	8
Asynchronous Class Activity	14
Independent Study	152
	200 Hours Total

****Indicative Resources: (eg. Core text, journals, internet access)**

The following materials form essential underpinning for the module content and ultimately for the learning outcomes:

Essential:

Online resource: OpenStax Anatomy & Physiology

Recommended Textbooks:

Martini F. H. & Bartholomew E. F. (2003) Essentials of Anatomy & Physiology, 3rd Ed. Prentice-Hall

Mader, S. Human Biology (12th Edn), McGraw-Hill Higher Education (2011) ISBN 978-0071315944

Other:

Lecture/tutorial notes/laboratory manual (provided via VLE)

(**N.B. Although reading lists should include current publications, students are advised (particularly for material marked with an asterisk*) to wait until the start of session for confirmation of the most up-to-date material)

Engagement Requirements

Students are academically engaged if they are regularly engaged with timetabled on-campus and online teaching sessions, asynchronous online learning activities, course-related learning resources, and complete assessments and submit these on time. Please refer to the Academic Engagement and Attendance Procedure at the following link: [Academic Engagement and Attendance Procedure](#)

For the purposes of this module, academic engagement equates to the following:

Attendance at synchronous sessions (lectures, workshops, practicals, and tutorials), completion of asynchronous activities, and submission of assessments to meet the learning outcomes of the module.

Supplemental Information

Programme Board	Biological Sciences and Health
Assessment Results (Pass/Fail)	No
Subject Panel	Biology L7-11
Moderator	Richard Thacker
External Examiner	D Stobo
Accreditation Details	This module is part of the BSc (Hons) Biomedical Science programme; accredited by Institute of Biomedical Science (IBMS) and approved by Health & Care Professions Council (HCPC) as part of BSc (Hons) Applied Biomedical Science programme. This module is part of the BSc (Hons) Applied Bioscience, BSc (Hons) Applied Bioscience with Forensic Investigation and BSc (Hons) Applied Bioscience and Zoology programmes; accredited by Royal Society of Biology (RSB)
Changes/Version Number	2.18 Mode of Delivery updated Pre-Requisite modules changed

Assessment: (also refer to Assessment Outcomes Grids below)

Class Test: constitutes 50% of the module mark.

Coursework: constitutes 50% of the module mark.

(N.B. (i) **Assessment Outcomes Grids** for the module (one for each component) can be found below which clearly demonstrate how the learning outcomes of the module will be assessed.

(ii) An **indicative schedule** listing approximate times within the academic calendar when assessment is likely to feature will be provided within the Student Handbook.)

Assessment Outcome Grids (Footnote A.)

Component 1

Assessment Type (Footnote B.)	Learning Outcome (1)	Learning Outcome (2)	Learning Outcome (3)	Learning Outcome (4)	Learning Outcome (5)	Weighting (%) of Assessment Element	Timetabled Contact Hours
Class test (written)	✓	✓	✓	✓	✓	50	2

Component 2

Assessment Type (Footnote B.)	Learning Outcome (1)	Learning Outcome (2)	Learning Outcome (3)	Learning Outcome (4)	Learning Outcome (5)	Weighting (%) of Assessment Element	Timetabled Contact Hours
Laboratory/ Clinical/ Field notebook	✓	✓	✓	✓	✓	50	8
Combined Total For All Components						100%	10 hours

Footnotes

A. Referred to within Assessment Section above

B. Identified in the Learning Outcome Section above

Note(s):

1. More than one assessment method can be used to assess individual learning outcomes.
2. Schools are responsible for determining student contact hours. Please refer to University Policy on contact hours (extract contained within section 10 of the Module Descriptor guidance note).
This will normally be variable across Schools, dependent on Programmes &/or Professional requirements.

Equality and Diversity

In line with current legislation (Equality Act, 2010) and the UWS Equality, Diversity, and Human Rights Code, our modules are accessible and inclusive, with reasonable adjustment for different needs where appropriate. Module materials comply with University guidance on inclusive learning and teaching, and specialist assistive equipment, support provision and adjustment to assessment practice will be made in accordance with UWS policy and regulations. Where modules require practical and/or laboratory based learning or assessment required to meet accrediting body requirements the University will make reasonable adjustment such as adjustable height benches or assistance of a 'buddy' or helper.

Please refer to the UWS Equality and Diversity Policy at the following link:

[UWS Equality and Diversity Policy](#)

(N.B. Every effort will be made by the University to accommodate any equality and diversity issues brought to the attention of the School)