

Module specification

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Module code	SCI643
Module title	Biology of Disease
Level	6
Credit value	20
Faculty	FSLS
Module Leader	Dr Joanne Pike
HECoS Code	100265
Cost Code	GANG

Programmes in which module to be offered

Programme title	Is the module core or option for this programme
BSc Biomedical Science	Core

Pre-requisites

None

Breakdown of module hours

Learning and teaching hours	24 hrs
Placement tutor support	0 hrs
Supervised learning e.g. practical classes, workshops	0 hrs
Project supervision (level 6 projects and dissertation modules only)	0 hrs
Total active learning and teaching hours	24 hrs
Placement / work based learning	0 hrs
Guided independent study	176 hrs
Module duration (total hours)	200 hrs

For office use only	
Initial approval date	21 April 2021
With effect from date	September 2023
Date and details of revision	Aug 2023 Derogation update
Version number	2

Module aims

The module develops the concept of disease within the context of the normal physiological mechanisms. It will build upon the knowledge of anatomy and physiology from year one module applied physiology in wellbeing. The module will explore pathophysiology of common conditions, beginning with a critical understanding of the pathological mechanisms of selected tissues, organs and organ systems and related pharmacology.

Module Learning Outcomes - at the end of this module, students will be able to:

1	Critically explore the pathogenesis of the disorder under study and pathology of relevant organ systems, and the structural changes of normal cells and tissues which may occur during disease
2	Interpret disease states and identify the impact on the human person in the form of a case study
3	Summarise current research literature relevant to the case study, justifying its inclusion and presenting it in an appropriate style (APA).

Assessment

Indicative Assessment Tasks:

This section outlines the type of assessment task the student will be expected to complete as part of the module. More details will be made available in the relevant academic year module handbook.

The student will present a case study as a 20 minute presentation which will provide detailed analysis of the case, a critical exploration of the pathogenesis of the disorder under study and pathology of relevant organ systems, interpreting disease states and the effect of lifestyle and ageing on the development of the condition where relevant. Students will also hand-in a well presented and contemporaneous reference list supporting the presentation with a short summary (max 150 words) of each reference justifying its support of the presentation.

Assessment number	Learning Outcomes to be met	Type of assessment	Weighting (%)
1	1,2	Presentation	80%
2	3	Written Assignment	20%

Derogations

For BSc (Hons) Biomedical Science only:

All elements of assessment for this module must be passed at or above 40%.

Compensation for failure is not permitted for this module and other "core" biomedical science modules across the programme.

Learning and Teaching Strategies

The module will be delivered in line with the University's Active Learning Framework and Delivery. Strategies used in this module will involve flipped classroom, scale-up methodologies and lead lectures, seminars, tutorials, case studies and student-led presentations. To supplement classroom learning by providing students with additional information and visual aids to further their understanding of the materials.

Indicative Syllabus Outline

Pathogenesis and origins of disease processes and the diagnosis and monitoring of disease across major systems (musculoskeletal, circulatory, respiratory, digestive, renal, urogenital, nervous, endocrine).

The nature of disease and fundamentals of pathology, to include the development of age-related diseases and the impact of lifestyle upon health and disease and the therapeutic strategies applicable to disease states. Courses therefore reflect a system-led approach that integrates the clinical specialities through underpinning knowledge of biomedical science processes, investigation and treatment used for specific disease.

Indicative Bibliography:

Please note the essential reads and other indicative reading are subject to annual review and update.

Essential Reads

Ahmed, N., Dawson, M., Smith, C. and Wood E (2007) *Biology of Disease* London: Taylor Francis

Phillips, J., Murray, P.G. and Kirk, P. (eds) (2001) *The Biology of Disease, 2nd Edition*. London: Wiley-Blackwell

Other indicative reading

Reisner, E and Reisner, H (2016) *Crowley's An Introduction To Human Disease: Pathology And Pathophysiology (10th Ed)* London: Jones and Bartlett

Employability skills – the Glyndwr Graduate

Each module and programme is designed to cover core Glyndwr Graduate Attributes with the aim that each Graduate will leave Glyndwr having achieved key employability skills as part of their study. The following attributes will be covered within this module either through the content or as part of the assessment. The programme is designed to cover all attributes and each module may cover different areas.

Core Attributes

Engaged
Creative
Ethical

Key Attitudes

Commitment
Curiosity
Confidence

Practical Skillsets

Digital Fluency
Organisation
Critical Thinking
Communication