

Module specification

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Module code	SCI549
Module title	Cellular & Histopathology
Level	5
Credit value	20
Faculty	FSLS
Module Leader	tbc
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 (Hons) Biomedical Science	Core

Pre-requisites

None

Breakdown of module hours

Learning and teaching hours	30 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	30 hrs
Placement / work based learning	0 hrs
Guided independent study	170 hrs
Module duration (total hours)	200 hrs

For office use only	
Initial approval date	21 April 2021
With effect from date	September 2022
Date and details of revision	
Version number	1

Module aims

The module aims to focus on clinical and current research topics in cytology and histopathology.

Specifically, the module will allow students to develop a critical appreciation of the clinical and laboratory importance of cytology and histopathology in the diagnosis and management of human disease.

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

1	Evaluate and analyse the aetiology, pathogenesis, laboratory findings and clinical presentation of common cytological disorders (e.g. cervical cancer).
2	Evaluate and analyse the aetiology, pathogenesis, laboratory findings, clinical presentation and treatment of histopathological disease (e.g. bone, lung, liver and muscle, etc.).
3	Demonstrate a critical awareness of the current research and clinical case studies relevant to cellular and histopathology.

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.

Assessment 1 (50%): Case Study (50%, 2000 word equivalent), assessing students' critical awareness of the current research and clinical case studies relevant to cellular and histopathology.

Assessment 2 (50%): Examination – 2 hours (50%, 2000 word equivalent), assessing students' ability to evaluate and analyse the aetiology, pathogenesis, laboratory findings and clinical presentation of common cytological disorders and histopathological disease, and the treatment of the latter.

Assessment number	Learning Outcomes to be met	Type of assessment	Weighting (%)
1	3	Written Assignment	50%
2	1-2	Examination	50%

Derogations

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 comprise of lectures, seminars and computer assisted learning (incorporating digital imaging). Appropriate use will be made of text and electronic resources (VLE).

Formative assessment will be provided in dedicated seminar sessions focussing on case study analysis and computer assisted learning. Students will be expected to attend all timetabled sessions.

Indicative Syllabus Outline

- Molecular pathology tests in assisting with diagnosis and prognosis of neoplastic and non-neoplastic diseases, e.g. *in situ* hybridisation.
- Cytopathology: aetiology, pathogenesis, clinical presentation and laboratory investigations of cervical cancer. Tests for non-cervical gynaecological malignancy (e.g. cytopathological diagnosis of cancer of respiratory tract, urinary tract and serous cavities).
- Histopathology: aetiology, pathogenesis, clinical presentation and laboratory investigations of common disease of major organs (e.g. bone, lung, liver, kidney, GI tract, brain and muscle; cellular changes in disease including aplasia, amyloidosis, dysplasia, hyperplasia, hypertrophy, metaplasia and neoplasia).
- Current research and clinical case studies relevant to cellular and molecular pathology
- Ethical issues associated with human cells & tissues
- Human Tissue Act (HTA)

Indicative Bibliography:

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

Essential Reads

Cook, D. J. & Warren, P. J. (2015) *Cellular pathology: An Introduction to Techniques and Applications*. (3rd ed.). Banbury: Scion Publishing.

Young, B., O'Dowd, G., & Stewart, W. (2011). *Wheater's basic pathology: A text, atlas and review of histopathology*. (5th ed.). Churchill Livingstone.

Other indicative reading

Ahmed, N., Dawson, M., Smith, C., & Wood, E. (2007). *Biology of disease*. New York: Taylor & Francis Group.

Kiernan, J. A. (2015). *Histological and histochemical methods: Theory and practice*. (5th ed.). Banbury: Scion Publishing.

PLOS Medicine (www.plosmedicine.org/)

British Journal of Biomedical Science (<http://www.bjbs-online.org/>)

European Journal of Medical Research (<http://www.eurjmedres.com/>)

Employability skills – the Glyndŵr Graduate

Each module and programme is designed to cover core Glyndŵr Graduate Attributes with the aim that each Graduate will leave Glyndŵr 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
Enterprising
Creative
Ethical

Key Attitudes

Commitment
Curiosity
Resilience
Confidence
Adaptability

Practical Skillsets

Digital Fluency
Organisation
Leadership and Team working
Critical Thinking
Emotional Intelligence
Communication