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## MODULE DESCRIPTOR

### Module Title

Fundamental Histology and Cytology

Reference	AS2501	Version	1
Created	September 2017	SCQF Level	SCQF 8
Approved	February 2018	SCQF Points	15
Amended	September 2017	ECTS Points	7.5

### Aims of Module

To enable students to acquire a knowledge of the fundamentals of human cytology and histology.

### Learning Outcomes for Module

On completion of this module, students are expected to be able to:

- 1 Describe the basic principles of histotechnology and perform histotechnological techniques in the laboratory.
- 2 Identify and differentiate between the components of cells and tissues from the major human organ systems and explain their functions.
- 3 Demonstrate a working knowledge of the basic applications of conventional and molecular diagnostic cytology.

### Indicative Module Content

Organisation of a histopathology department and its value in the diagnostic process. Fixation, dehydration, impregnation and embedding. Tissue sectioning, basic principles of Haematoxylin and Eosin staining. Structure of an electron microscope and organelle identification in electron micrographs. Principles of immunocytochemistry. Principles of molecular cytological techniques. Recognition of cell types from epithelial, connective, muscle, nerve and blood tissue; recognition of cells and tissues from the cardiovascular, nervous, integumentary, digestive, respiratory, lymphatic, endocrine, reproductive and renal systems.

### Module Delivery

This is a blended study module, which consists of student-based e-learning supplemented with lectures, tutorials and practical laboratory sessions.

### Indicative Student Workload

	Full Time	Part Time
Contact Hours	40	N/A
Non-Contact Hours	110	N/A
Placement/Work-Based Learning Experience [Notional] Hours	N/A	N/A
TOTAL	150	N/A
<i>Actual Placement hours for professional, statutory or regulatory body</i>		

**ASSESSMENT PLAN**

*If a major/minor model is used and box is ticked, % weightings below are indicative only.*

**Component 1**

Type: Examination Weighting: 70% Outcomes Assessed: 1, 2, 3

Description: Unseen, 'spotter's test' examination.

**Component 2**

Type: Coursework Weighting: 30% Outcomes Assessed: 3

Description: This component is assessed by the submission of a portfolio of evidence which highlights the application of conventional and molecular cytological techniques to a given pathology.

**MODULE PERFORMANCE DESCRIPTOR****Explanatory Text**

The module is assessed using the two components as detailed in the Assessment Plan. To pass this module, candidates must achieve a Module Grade D or better.

Module Grade	Minimum Requirements to achieve Module Grade:
<b>A</b>	Final aggregate mark of 70% or greater and a minimum of 35% in C1 and C2
<b>B</b>	Final aggregate mark of between 60-69% and a minimum of 35% in C1 and C2
<b>C</b>	Final aggregate mark of between 50-59% and a minimum of 35% in C1 and C2
<b>D</b>	Final aggregate mark of between 40-49% and a minimum of 35% in C1 and C2
<b>E</b>	MARGINAL FAIL. Final aggregate mark of between 35-39% and a minimum of 35% in C1 and C2
<b>F</b>	FAIL. A mark of less than 35% in either component
<b>NS</b>	Non-submission of work by published deadline or non-attendance for examination

**Module Requirements**

Prerequisites for Module	Successful completion of Stage 1 or equivalent.
Corequisites for module	None.
Precluded Modules	None.

**INDICATIVE BIBLIOGRAPHY**

- 1 BANCROFT, J.D. and GAMBLE, M. *Theory and Practice of Histological Techniques*. Current Edition. Churchill Livingstone.
- 2 GARTNEW, L.P. and HIATT, J.L. *Color Textbook of Histology*. Current Edition. W. B. Saunders Company.
- 3 STEVENS, A., and LOWE, J.S. *Human Histology*. Current Edition. Mosby.
- 4 YOUNG, B., et al. *Wheater's Functional Histology: A Text and Colour Atlas*. Current Edition. Churchill Livingstone.
- 5 TALLITSCH, R. and GUASTAFERRI, R. *Histology: An Identification Manual*. Current Edition. Mosby.
- 6 KIERNAN, J.A. *Histological and Histochemical methods: Theory and Practice*. Current Edition. Scion Publishing Ltd.
- 7 Orchard, G. and Nation, B. *Histopathology* Current Edition. Oxford University Press.
- 8 Shambayati, B. *Cytopathology* Current Edition. Oxford University Press.