

Module Title Cellular Pathology	Reference AS4018 SCQF SCQF Level 10 SCQF Points 15 ECTS Points 7.5 Created July 2002 Approved September 2004 Amended May 2011 Version No. 3
Keywords Histopathology, histochemistry, immunocytochemistry, electron microscopy, cytopathology, disease.	

This Version is No Longer Current

The latest version of this module is available [here](#)

Prerequisites for Module

In addition to SCQF 10 entry requirements, students should be familiar with the fundamentals of human cytology and histology.

Indicative Student Workload

	Full Time
<i>Contact Hours</i>	
Assessment	4
Hospital Visit	2
Laboratory Work	10
Lectures/Tutorials/Seminars	24

Corequisite Modules

None.

<i>Directed Study</i>	
Directed Study	30

Precluded Modules

None.

<i>Private Study</i>	
Private Study	80

Mode of Delivery

This is a lecture based course supplemented with tutorial sessions, case studies, laboratory work and practical demonstrations.

Aims of Module

To provide students with the ability to explain the techniques, methods and role of histopathology in the diagnosis of disease.

Assessment Plan

Learning Outcomes for

Learning Outcomes Assessed

Module

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

1. Discuss the specialised procedures and staining of histological specimens.
2. Discuss the diagnostic value of specialised procedures such as histochemistry, immunocytochemistry and electron microscopy.
3. Discuss the preparation of cytological specimens.
4. Distinguish between the structure of cells and tissues in the normal and diseased state.

Indicative Module Content

Histopathology: specialised procedures, principles of colouration and staining.
Histochemistry: pigments, lipids, nucleic acids and enzymes. Image analysis.
Interpretation of microscopic sections.
Immunocytochemistry and its value. Use of tumour markers.
Applications of molecular techniques. Electron Microscopy: applications in the diagnosis of disease. Cytopathology: screening programmes.
Recognition of cell types and the changes brought about by

Component 1	1,2,3
Component 2	4

Component 2 is assessed by an oral presentation.

Component 1 is assessed by a closed book examination.

Indicative Bibliography

1. BANCROFT, J.D. AND GAMBLE, M. *Theory and Practice of Histological Techniques*. Current Edition. Churchill Livingstone.
2. GRAY, W. AND McKEE, G.T. (ed.). *Diagnostic Cytopathology*. Current Edition. Churchill Livingstone.
3. YOUNG, B., O'DOWD, G. and STEWART, W. *Wheater's Basic Pathology: A Text, Atlas and Review of Histopathology*. Current Edition. Churchill Livingstone.
4. KIERNAN, J.A. *Histological and Histochemical Methods : Theory and Practice*. Current Edition. Scion Publishing

disease. Diagnostic cytopathology, recognition of cell types in respiratory specimens and body fluids, fine needle aspiration. Histopathology: The general basis of disease, the changes in cells and tissues associated with inflammation, thrombosis, infarction and tumours.