

Module Title Human Cytology and Histology Keywords Histotechnology, histochemistry, histology.	Reference AS2905 SCQF Level SCQF 9 SCQF Points 15 ECTS Points 7.5 Created January 2004 Approved May 2011 Amended May 2008 Version No. 1
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This Version is No Longer Current

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

Prerequisites for Module

In addition to SCQF 8 entry requirements students should be familiar with basic cell biology and human anatomy.

Corequisite Modules

None.

Precluded Modules

None.

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:

Mode of Delivery

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

Assessment Plan

	Learning Outcomes Assessed
Component 1	1
Component 2	2
Component 3	3

Component 1 is assessed by a homework exercise.

Component 3 is assessed by a laboratory skills exercise.

1. Discuss the basic principles of histotechnology.
2. Distinguish between the components of cells and tissues from all organ systems and explain their functions.
3. Perform basic histotechnological techniques.

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.

Indicative Student Workload

<i>Contact Hours</i>	Blended Learning
Demonstrations/Visits	2
Laboratory Work	10
Lectures	8
Supervised Assessment	1
Tutorials	5

Component 2 is assessed by a spotter's test.

Indicative Bibliography

1. BANCROFT, J.D. and GAMBLE, M., 2008. Theory and Practice of Histological Techniques. 6th ed. Churchill Livingstone.
2. GARTNEW, L.P. and HIATT, J.L., 2007. Color Textbook of Histology. 3rd ed. W. B. Saunders Company.
3. STEVENS, A., and LOWE, J.S., 2005. Human Histology. 3rd ed. Mosby.
4. YOUNG, B., LOWE, J.S., STEVENS, A. and HEATH, J.W., 2006. Wheater's Functional Histology: A Text and Colour Atlas. 5th ed. Churchill Livingstone.
5. TALLITSCH, R. and GUASTAFERRI, R., 2009. Histology: An Identification Manual. Mosby.
6. KIERNAN, J.A., 2008. Histological and Histochemical methods: Theory and Practice. 4th Ed. Scion Publishing Ltd.

Directed Study
e-Learning 50

Private Study
Private Study 74