



Module Descriptor for CNWY40170 in 2014

Printed on 25 April 2014

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Conway Institute of Biomolecular & Biomedical Research

Short Title	Long Title
Fundamental Biological Imaging	Fundamental Biological Imaging

Level	Credits	Semester	Passing Grade	Available on Blackboard ?	Module Coordinator	Status	Last Modified
4	2.5	Semester One	40 %	Yes	Jeremy Simpson	Continuing Module	26 Jul 2013

Total Places	Core /Option	In Prog	Gen Electives	Intl Places
40	40	0	0	0

Module Description

This module is designed for students who wish to understand and become critically aware of the basic principles, practice and applications of rapidly developing imaging technologies. Particular focus is given to white and fluorescent light-based imaging approaches. A series of lectures will inform about the concepts of imaging and microscopy; application of histology, immunohistochemistry and immunofluorescence; basics of wide-field microscopy, confocal microscopy and high content screening microscopy; techniques in light microscopy and live cell imaging; and also the relationship between light microscopy and electron microscopy. Structured workshop sessions will also allow the students to visually experience the operation of various pieces of microscopy equipment.

Learning Outcomes

On completion of this module students will have thorough insight into the variety of imaging and microscopy approaches available to the life sciences. In addition they will have a basic understanding of key issues in the design and execution of imaging-based experiments as used to study biological samples.

Workload

Type	Hours
Laboratories	8
Lectures	10
Autonomous Student Learning	45
Total	63

Assessment Details

Description	Timing	Score By	% Final Grade	In Blackboard ?
Exam to be held at host institute of student	Varies	LET	100	Y
Total			100	

Module Resits

Resit Type	Duration - Hours	Timing Weeks
In-semester assessment	2	VAR

Module Remediation Strategies

Remediation

If you fail this module you may repeat, resit or substitute where permissible

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