Module Specification

Module Title	Techniques in Biomedical Sciences						e Code BMD219
Credit Value	15	Level	5	Mode of Delivery	On Campus		Semester A

Pre-requisite modules	Co-requisite modules	Overlapping modules
Module is restricted to B990 students		

1) Content Description

Provide a description of the module, as it will appear in the Module Directory and on the Student Information System (approx. 70-80 words).

This module is restricted to B990 students. In this module you will improve your ability to handle information, to conduct independent study and to extract information from the scientific literature. The work will lead you to better appreciate understand the principles that underlie the techniques used in biomedical science research and analysis laboratories in academia and the NHS. You will cover a wide range of current techniques.

You will explore how technical innovations have driven scientific discovery and biomedical progress and the role of Life Science industry in development and automation of biomedical techniques. Through this you will gain a broader perspective on potential career pathways associated with innovation and enterprise.

2) Module Aims

Specify the aims of the module, i.e. the broad educational purposes for offering this module.

The module aims to provide second year Biomedical Science students with a basic understanding of the theory and application of modern laboratory techniques used by academic bioscientists and NHS Biomedical Scientists.

3) Learning Outcomes

Identify the learning outcomes for this module, i.e. knowledge, skills and attributes to be developed through completion of this module. Outcomes should be referenced to the relevant <u>QAA benchmark</u> statements and the <u>Framework for Higher Education Qualifications in England</u>, Wales and Northern <u>Ireland (2008)</u>. The <u>SEEC Credit Level Descriptors for Further and Higher Education 2003</u> and <u>Queen</u> <u>Mary Statement of Graduate Attributes</u> should also be used as a guiding framework for curriculum design.

Academi	c Content:
A 1	By the end of this module students should have theoretical and practical knowledge of the techniques employed in research and NHS bioscience laboratories

Disciplinary skills - able to:

R1	This module will enhance students' understanding of the principles that underlie the techniques used
	in biomedical science research and analytical laboratories in academia and the NHS

Attribut	tes:
C1	The module will enhance students' general scientific understanding and knowledge of laboratory techniques through lecture material and laboratory exercises. Particularly, the student will have knowledge of how to perform a variety of techniques
C2	Overall, the module will improve the students' ability to handle information, to conduct independent study and to extract information from the scientific literature
QMUL	Model Learning outcomes – Level 5:
D1	(Networking) Evaluate and demonstrate evidence of their skills to support networking and how these have influenced their practice, their subject discipline and their career aspirations
DZ	(Enterprising Perspectives) Recognise and prioritise areas for developing their own enterprising perspectives

4) Reading List

Provide an indicative reading list for the module. This should include key texts and/or journals but should not be an exhaustive list of materials.

Practical Skills in Biomolecular Sciences2 R Reed, D Holmes, J Weyers, A Jones. Fifth Edition. (Pearson)

Clinical Laboratory Science – The basics and routine techniques" M Turgeon Fifth Edition (Mosby Elsevier)

5) Teaching and Learning Profile

Provide details of the method of delivery (lectures, seminars, fieldwork, practical classes, etc.) used to enable the achievement of learning outcomes and an indicative number of hours for each activity to give an overall picture of the workload a student taking the module would be expected to undertake. This information will form the Key Information Set for each undergraduate programme and will be used to populate the KIS widget found on the QMUL programme information pages. More information can be found online about KIS. You may also wish to refer to the QAA guidance on contact hours when completing this section.

Activity Type	KIS Category	Time Spent (in hours)	
Lecture	Scheduled	22	
Practicals	Scheduled	9	
	Total	31	

Specify the total module notional study hours. This should be a total of the hours given for each activity. The notional study hours for each academic credit point is 10. A 15 credit point module therefore represents 150 notional study hours.

Activity Type	Total Time Spent (in hours)	Percentage of Time Spent	
Scheduled learning and teaching	31	20.7	
Placement	0	0	
Independent Study	119	79.3	
Total	150	100	

Use the information provided in the box above to specify the total time spent and the percentage time spent in each category of teaching and learning activity.

6) Assessment Profile

Provide details of the assessment methods used to assess the achievement of learning outcomes.

Description of	Assessment	KIS Category	Duration/Length	Percentage	Final	Qualifying
Assessment	Туре			Weighting	element of	Mark
					assessment	
Practical	Report	Coursework		10%	No	
Report 1						
Practical	Report	Coursework		20%	No	
Report 2						
Coursework	Essay	Coursework	1,500 words	20%		
Examination	Written	Written	1.5 hours	50%	Yes	
	Exam					

Final element of assessment: The assessment that takes place last. There should normally be only one element of assessment marked as final unless two assessment or submission dates occur on the same day.

Qualifying mark: A specified minimum mark that must be obtained in one or more elements of assessment in order to pass a module. This is in addition to, and distinct from, the requirement to achieve a pass in the module mark to pass the module.

Reassessment

Provide details of the reassessment methods used, specifying whether reassessment is either standard reassessment or synoptic reassessment.

Synoptic reassessment details (if you have indicated synoptic reassessment above, please give details)

Brief Description of Assessment	Assessment Type	Duration/Length of Examination/ Coursework
Examination	Exam	1 Hour and 30 Minutes