Module Specification

Module Title Essential Skills for Biomedical Scientists						Module	Code	BMD100	
Credit Value 15	Level	4	Mode of Delivery		On Campus		5	Semes	ter A & B
Pre-requisite modules		Co-requisite modules			Overlapping mod	ules			

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 covers some of the fundamental skills required by biomedical scientists. This module is structured around three main themes:

(1) Acquiring Essential Skills for Biomedical Sciences. The module will support students in acquiring a variety of key skills such as data and information handling, oral and written communication skills (including essay writing), experimental design, literature search techniques and appropriate use of referencing and citations in the biomedical sciences. The module will explain how certain aspect of mathematics and chemistry underpin biomedical sciences and will support students in acquiring basic numerical and chemical skills (including SI units, order of magnitude, basic geometry, calculation of concentration and molarity, scales in time, linear and logarithmic equations and graphs). Students will also be introduced to the use of statistical analysis to support biomedical sciences.

(2) Considering the role of biomedical sciences in the "real world". Through personal investigations, workshops on critical thinking and a series of talks from professionals, students will be encouraged to consider the role of biomedical sciences in an applied context and gain a more global perspective of their discipline.

(3) Exploring Career Pathways. Students will be given an opportunity to explore various career choices, to reflect on their own career aspirations and to meet with professional scientists from diverse

2) Module Aims

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

The aim of this module is to provide students with:

- (1) An understanding of how basic mathematics provide tools for problem solving in biomedical sciences
- (2) The basic skills necessary to underpin a successful degree programme in the biomedical sciences
- (3) An intuitive understanding of basic concepts in quantitative biology, so that students who go on to do more advanced statistics and to use powerful packages in statistics have some concept of what is being calculated and why
- (4) An understanding of the career paths available to graduates in biomedical sciences and an opportunity to reflect on own career aspirations
- (5) To consider applications of biomedical sciences in the real world

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 Framework for Higher Education Qualifications in England, Wales and Northern Ireland (2008). The <u>SEEC Credit Level Descriptors for Further and Higher Education 2003</u> and <u>Queen Mary</u> <u>Statement of Graduate Attributes</u> should also be used as a guiding framework for curriculum design.

	Academic Content:				
ſ	A1	Acquire and/or practice skills that are ubiquitous and necessary across biomedical careers.			

Disciplinary skills - able to:						
B1	Apply subject knowledge and understanding to address problems and make evidence-based decisions.					
B2	Plan an experiment in terms of hypothesis, samples, tests or observations, appropriate controls, observable outcomes and statistical analysis.					
B3	Identify, collate, process, analyse, interpret and present data generated locally or published globally.					
B4	Communicate to a variety of audiences using a range of formats and appropriate scientific language including appropriate acknowledgement of sources and avoiding plagiarism.					
B5	Recognise moral and ethical issues in biomedical sciences and its application to healthcare.					
B6	Understand the wider context of biomedical sciences, including social, political, economic and commercial perspectives.					

Attributes:					
C1	Identify personal, study and career goals, both short and long-term, and perform in a manner appropriate to achieving those goals.				
C2	Recognise and respect the views and opinions of others.				
ß	Use skills of negotiation and influence to achieve group goals.				
C4	Demonstrate skills for self-managed and lifelong learning, including working independently, adaptive				
C5	Apply confidence by taking ownership of the topics of learning.				

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.

There is no reading list for this module.

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	7
Workshops/Tutorials	Scheduled	14
	Total	21

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	21	14
Placement	0	0
Independent Study	129	86
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	Assessment Type	KIS Category	Duration/Length	Percentage Weighting	Final element of assessment	Qualifying Mark
Short written work	Written assignment	Coursework		12.5%		
Poster	Written assignment	Coursework		12.5%		
Essay	Written assignment	Coursework		25%		
In class test	In class test	In class test		50%		

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	Written Exam	1 hr 30 min