# **Module Specification**

Module Title	Essential Skills for Biomedical Scientists Modu					Module	Code	BMD100		
Credit Value	15	Level	4	Mode of Delivery		On Campus		:	Semes	ster A & B
Pre-requisite modules		Co-req	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 backgrounds.

## 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 <a href="QAA benchmark statements">QAA benchmark statements</a> 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 Statement of Graduate Attributes</u> should also be used as a guiding framework for curriculum design.

Academic Content:					
A1	Library skills; finding information through online databases				
A2	Knowing when and how to cite references and bibliographic information				
А3	Basic numerical computations, scales and conversion factors, exponents and graph drawing				
A 4	Experimental design and the application of a range of simple, parametric and non-parametric statistics.				

Disciplinary skills - able to:				
E	31	The objective of this module is to provide a sound knowledge of the essential writing and numeric skills that biologists need, which can form the basis of their respective programme of study	;	

Attributes:					
C1	The course work will improve planning, problem solving and organisational skills				
C2	Overall, the module will improve the students' ability to handle information, to conduct independent study and to extract information from the scientific literature				

QM Model Outcomes:					
D1	Identify and discuss their own career aspirations or enterprise skills and knowledge and how they impact on others.				
D2	Identify and demonstrate the perspectives or problem solving techniques of different disciplines				
D3	Consider the role of their discipline in diverse cultural and global contexts				

## 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
Coursework	Written assignment	Coursework		100%	Yes	

**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.

Standard Reassessment
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	2 hr 30 min			