## **Module Specification**

Module Title	Biochemistry Communication (3 <sup>rd</sup> year)				Modul	e Code BIO301	
Credit Value	15	Level	6	Mode of Delivery	On Campus	]	Semester B
Pre-requisite	modules	i	Co-req	uisite modules	Overlapping mod	dules	
							7

## 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).

Most of the teaching will be via small-group tutorials where students will develop an appreciation and experience in various aspects of communication in biochemical science. The module will focus on types and structure of scientific communication, as well as types of journals and the process of peer review. Tutorials will cover approaches to effective short essay writing and delivering scientific talks. Attendance at research seminars is required and a library workshop to developing literature search skills is part of the course. Tutorials will require a high level of student participation. A number of essays and other coursework will be set and assessment for the module will be Coursework (60%) Final Exam (40%).

## 2) Module Aims

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

The aims of the module are to give students an understanding of the processes of communicating science.

Objectives include:

1) An appreciation of the types and structure of scientific communication within a biochemical context. An understanding of the process of peer review.

2) Approaches to searching for and using scientific literature

3) Effective short essays writing, in particular approaches to directly addressing a question, planning an essay and essay structure, editing your work.

4) Preparing and delivering a scientific talk

5) Preparing a podcast or video for public communication of science

Format of the module:

~Nine two hour tutorials

~Three formal lectures

A workshop: Library Based workshop, searching scientific literature

Attendance at six (or more) 1 hr Research Seminars over the two year period

## 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>, <u>Wales and Northern</u> <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.

Acaden	nic Content:
A 1	Distinguish the types of scientific literature within a biochemical context. For example: original articles, reviews and journalistic pieces.
A2	Understand the structure of original articles within a biochemical context. In particular explain role of the: abstract; introduction; method; results; discussion and conclusion.
A3	Describe the process of peer review and journal hierarchy.
A4	Apply the appropriate method of citation within scientific literature
A5	Relate the appropriate approached to searching for specific data concepts and arguments.
A6	In short essay writing demonstrate the importance of defining terms within an introduction, planning the structure of an essay
A7	Relate approaches to de-constructing essay questions to evaluate meaning

Disciplinary skills - able to:				
B1	Make judgments and appraise the relevance and importance of scientific data arguments and concepts			
B2	Apply knowledge of the appropriate structure of an essay to plan and compose scientific argument			
B3	Arrange ideas, facts and intellectual arguments in a logic order			
B4	Revise and edit text			
B5	Prepare information for oral presentation and podcast or video			
B6	Present data and communicate ideas effectively both written and orally			

Attributes	
C1	Grasp the principles and practices relating to the publication of scientific discovery
C2	Connect information and ideas within the biochemical discipline
C3	Critically evaluate the reliability of different sources of information.
C4	Engage with the process of scientific discovery
C5	acquire and apply knowledge in a rigorous way
C6	produce analyses which are grounded in evidence
C7	Use writing for learning and reflection
C8	Respond appropriately to criticism
C9	The ability to reflect upon and assess their own progress
C10	Possess transferable skills to help them with presenting data and arguments both orally and written

## 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.

General Biochemistry Text Books and Journals

# 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)
Tutorial	Scheduled	18
Lecture	Scheduled	3
Practical Classes and Workshops	Scheduled	4
Seminar	Scheduled	9
Guided Independent Study	Independent	116
	Total	150

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	34	22.7
Placement	0	0
Independent Study	116	77.3
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	Assessment Type	KIS Category	Duration/Length	Percentage Weighting	Final element of assessment	Qualifying Mark
Written Examination	Examination	Written Exam	2 Hours	40%	Yes	
Various Research, Editing and Writing Tasks	Written assignment including essay and podcast or video	Coursework	116 Hours	60%	No	40%

**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		
Resit Examination	Written Exam	2 Hours		

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