Module Specification

Module Title The Business	of Pharmacology		Module Code BMD271
Credit Value 15 Leve	5 Mode of Delivery	On Campus	Semester B
Pre-requisite modules	Co-requisite modules	Overlapping modules	
Tre-requisite modules	Co-requisite modules	Overlapping modules	

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 will bring together pharmacology knowledge and apply it in the context of commercialisation. Students will examine and compare
small and start up enterprises, including University spin outs alongside larger pharmaceutical companies. This module will also introduce aspects
of finance, intellectual property rights, business law and marketing for business development.

2) Module Aims

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

The overall aim of this module is to develop students' enterprise awareness, teamwork skills and employability abilities with emphasis on employability skills. Students will have the opportunity to hear talks from University scientists, young entrepreneurs and industry experts who have been involved in business start-ups, running SMEs and large multinational pharmaceutical companies. They will also be given the opportunity to undertake site visits.

By the end of the module students should have gained practical experience in the commercialisation of an exciting new pharmacological agent from initial clinical use to internationally market leading brand. Students will also understand why potentially useful drugs fail to make market.

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

Academic Content:				
A1	Critical analysis of real healthcare problems and to develop business strategies to solve these.			
A2 To be able to discern between commercially viable and non-viable products				
A3	To understand the different business models used by large and small pharma			
A4	To assess future prospects for European and world markets for new therapeutic agents and the factors which affect global sales			
A5	Be able to appraise the national and international systems for obtaining patents for products			

Disciplina	ry skills - able to:
B1	Critically evaluate published research studies
B2	Conduct laboratory experiments safely with care and precision
В3	Write scientific reports and present scientific data

Attributes	:
C1	Have the intellectual curiosity to learn continuously from diverse sources of information
C2	Be able to explain complex scientific concepts clearly and logically
C3	Make judgements based on evidence
C4	Effective time management and independent learning

QM Model Learning outcomes:			
D1	(Enterprising Perspectives) Recognise and prioritise areas for developing their own enterprising perspectives		
D2 (Enterprising Perspectives) Demonstrate and evaluate how they have enhanced their own through engaging in enterprising skills and behaviours			

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.

^{*} Rang & Dale's Pharmacology: with STUDENT CONSULT Online Access by Humphrey P. Rang, Maureen M. Dale, James M. Ritter and R. J. Flower, Publisher: Churchill Livingstone; 7th Revised edition (25 Mar 2011), ISBN-10: 070203471

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	20
Tutorial	Scheduled	3
External Visits	Scheduled	4
Practical Classes and Workshops	Scheduled	6
Guided independent study	Independent	117
	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	33	22
Placement		
Independent Study	117	78
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	Assessment	KIS	Duration/Length	•	Final	Qualifying
of	Type	Category		Weighting	element of	Mark
Assessment					assessment	
Coursework	Report 1	Coursework		8%	No	
Coursework	Report 2	Coursework		8%	No	
Coursework	Essay	Coursework		75%	Yes	
Oral	Oral	Practical		9%	No	
presentation	assessment					
	&					
	presentation					

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			
Exam	Written Examination	3 hours			
Coursework	Report	2000 words			
	Oral assessment & presentation	15 min			