Module Specification

Module Title Causes and Prevention of Disease   Module Code BMD153

Credit Value 15   Level 4   Mode of Delivery On Campus   Semester A

Pre-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).

The most common causes of death and disease have changed dramatically over time. In this module you will explore how careful observation, experiment and analysis may eventually lead to improvement in health and in our ability to treat disease. Using examples of medical success stories you will look at the processes of scientific discovery and the many factors involved in moving from the discovery to the implementation of measures to prevent or treat disease. You will learn about the importance of statistical analysis in testing the effect of treatments or changes in behaviour. You will also look at the costs and benefits of medical research, who decides what research should be done, and who pays for it.

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 a context for the study of biomedical topics, and explore how advances in basic and medical science may eventually lead to improvement in health and the ability to treat disease. Historical and recent examples will illustrate the research, development and implementation processes involved in moving from scientific discovery to use of a treatment or preventative measure in the health service. Key concepts in statistics will be introduced and illustrated with reference to examples of medical progress. Students will be encouraged to think about ethics and impact in research, who decides what research should be done, and who pays for it. In the course of the module students will have a chance to consider the different careers that are involved in the health and life science arena. The module provides an introduction to epidemiology, translational medicine and public health. It complements the introductory modules that are specific to each degree programme in which specific scientific developments are explored.

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 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:	
A 1	Describe the major causes of death and disease now and in the past and in developed and developing countries
A 2	Explore the contribution of scientific and medical advances to changes in mortality and morbidity over time
A 3	Recognise the value of accurate collection and analysis of data in promoting health improvement
A 4	Describe in outline the organisation of healthcare and (bio)medical research in the UK

A 5	Consider the ethical impact of medical research, including the collection of personal/patient data

Disciplinary skills - able to:	
B 1	Describe basic epidemiological study designs
B 2	Apply appropriate statistical analysis and interpret results
B 3	Identify appropriate literature and be able to extract and interpret relevant information to answer specific questions
B 4	Present and describe scientific data in the form of appropriate graphs, tables and written reports

Attributes:	
C 1	Recognise the impact of medical science and research on society including the potential for both benefit and harm.
C 2	Communicate scientific information with clarity and accuracy verbally and in written form
C3	Engage in team working to solve problems

4) Reading List

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

Wald NJ. The Epidemiological Approach. (1st edition) St Bartholomew's Hospital Medical College, 1985. (2nd edition 1991, 3rd edition 1996)

(The book will be available for purchase for the discounted student price of £5.00 at the first lecture. Prof Wald will also personalise and sign copies on request. Alternatively, please contact Karyne Villeneuve at k.villeneuve@qmul.ac.uk or 020 7882 6281 to purchase a copy.)

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
Practical Classes and workshops	Scheduled	6
Guided independent study	Independent	122

	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	23
Placement		
Independent Study	116	77
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.

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
Examination	Written Exam	Written	1.5 hrs	75	Yes	N/A
Coursework	Written assignment, including Essay	Coursework		25	No	N/A

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
Written Exam	Written Exam	1.5 hr