## **Module Specification**

Module Title	Cellular Pathology and Blood Science			Modul	Module Code BMD321		
Credit Value	15	Level	6	Mode of Delivery	On Campus		Semester A

Pre-requisite modules	Co-requisite modules	Overlapping modules
Module Restricted to B990 students	BMD383	

# 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 Module provides an overview of basic pathological mechanisms including cell injury, wound healing, inflammation and cell adaptations. The process of neoplasia and the characteristics of major solid tumours will be covered including a review of the mechanisms of tumour spread. The Haematology component will cover basic haematopoiesis, anaemia, haemaglobinophathies, thalassaemia, myelodysplasia, haematological malignancies, haemostasis and bleeding and thrombotic disorders of haemostasis. An overview of the history and basis of blood transfusion and its complications will also be provided. The practical sessions will build on the earlier Microanatomy, Histology and Cytology Module in providing exposure to the histological and cytological interpretation of disease.

### 2) Module Aims

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

The module aims to provide an understanding of basic pathological processes with an overview of both nonneoplastic and neoplastic disease of solid organs. It aims to outline the differences between benign and malignant tumours and the characteristics of the major tumours of solid organs.

The Haematology component will provide an understanding of haematopoiesis and haemostasis and outline the major non-neoplastic and neoplastic haematological disorders.

The final Transfusion Science component will give an overview of factors involved in blood transfusion, safety issues and complications.

Throughout this Module there will be an emphasis on understanding basic pathological processes and the role of Pathology in disease diagnosis. This will be further supported by the practical microscopy sessions where students will have direct exposure to pathological material.

#### 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> <u>statements</u> 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.

Academi	ic Content:
A 1	At the end of this module the student should be able to; Explain the role of pathology in disease diagnosis

A2	Describe the basic mechanisms of cell injury, tissue healing, inflammation and cell adaptations
A 3	Describe the features of neoplasia and outline the characteristics of major solid tumours, their pattern of spread and their prognosis
A4	Review the mechanisms involved in the process of tumour spread
A5	Describe the process of haematopoiesis, describe the major anaemias and describe the features of haematological malignancies
A6	Understand the basis of haemostasis and describe the major bleeding and thrombotic disorders and review the background of blood transfusion, the basis of blood transfusion and the complications, and the range of products available for transfusion

Disciplinary skills - able to:

B	(* )	This module will enhance the students ability to understand the basic mechanisms underlying common diseases, and through this, an understanding of the role of Pathology in disease diagnosis
В		The practical sessions will also enhance the ability of students to interpret histological features to aid the diagnosis of disease

At	Attributes:				
С	,1	This module will build on the 1 <sup>st</sup> semester module in microanatomy, histology and cytology to demonstrate to the student how an understanding of basic histology and pathological processes can contribute to the diagnosis of disease			
С	~	Lectures will provide students with the necessary factual information and the practical sessions and linked coursework will stimulate the student to apply this factual knowledge in the interpretation of disease			

## 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.

Robbins and Cotran Pathological Basis of Disease. Kumar, Abbas & Fausto. Elsevier Saunders. 7<sup>th</sup> Edition.

Essential Haematology. A.V. Hoffbrand. Blackwell Science.

Haematology at a Glance. A.B. Mehta & A.V. Hoffbrand.

# 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	22
Practical Work		12
	Total	34

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	22.67
Placement	0	0
Independent Study	114	77.33
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
Examination	Exam	Coursework	3 Hours	80%	Yes	
Practical 4: In class assessment	In class assignment	In class assignment	1 hour	7.5%	No	
Practical 2: Post Practical Quiz	Practical	Practical	1 hour	7.5%		
Completion of practical handbook	Practical	Practical		5%		

**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	Exam	3 Hours