



### **Planning and Quality Assurance Affairs**

Form (A)

# **Course Specifications**

Course name	Boold & Lymphoreticular System
Course number	MDCN3423
Faculty	
Department	
Course type	Major Needs
Course level	3
Credit hours (theoretical)	4
Credit hours (practical)	0
Course Prerequisites	

## **Course Objectives**

- 1 Describe the constituents of blood, their origin and function
- 2 Discuss the structure and function of the lymph-reticular system.
- 3 Describe the important aspects of hemoglobin genetics and abnormal hemoglobin
- 4 Understand the basic classification systems of anemia, their laboratory and clinical features, public health aspects, and their management
- 5 Understand the classification of neoplastic diseases of hematopoietic cells, methods for their diagnosis and their natural history and general guidelines for their management.
- 6 Describe the regulatory mechanisms of normal Hemostasis, abnormalities that lead to bleeding disorders, pathologic aspects that cause thrombotic disorders and how are these conditions being treated.

### **Intended Learning Outcomes**

Knowledge and Understanding	*	Identify and describe the macroscopic appearance of different parts of the blood and lymphoreticular system
	*	Describe the microscopic appearance of different parts of the blood and lymphoreticular system
	*	Understand the molecular and cellular basis of common diseases of blood and lymphoreticular system
	*	Recognize the different types and causes of bleeding disorders
Intellectual Skills	*	Integrate the basic anatomical & physiological facts of blood and lymphoreticular system with clinical data
Professional Skills	*	Identify common diseases of peripheral blood, bone marrow and lymph nodes.
General Skill	*	Respect superiors, colleagues and any other members of the health profession.
	*	Communicate ideas and arguments effectively
	*	Work constructively and cooperatively within a team

## **Course Contents**

- 1 Hematopoiesis Histology of blood cells
- 2 Blood: composition, function, volume and viscosity General overview of homeostatic process
- 3 RBCs structure, Hemoglobin and Iron metabolism
- 4 \_ Molecular biology of globin chain synthesis
- 5 Introduction to anemia, classification
- 6 Biochemistry of Coagulation
- 7 Drugs used for anemia
- 8 Bleeding Disorders
- 9 \_ Anticoagulants & Antiplatelet Agents
- 10 Lymphatic system
- 11 Histology of lymphoid tissue
- 12 WBC Disorders
- 13 WBC Disorders
- 14 \_ Immunological diseases of blood and lymphatic system
- 15 Immunomodulators

### **Teaching and Learning Methods**

- 1 Theoretical interactive lectures
- 2 practical lab sessions

## **Teaching and Learning Methods for the Disabled Students**

- 1 Lectures
- 2 Help each student according to his needs and his condition

### **Students Assessment**

Assessment Method	<u>TIME</u>	MARKS
paper 1 exam	60	30
paper 2 exam	60	50
practical exam	60	20

## **Books and References**

Essential books	-	Clinical anatomy by systems, R.S. Snell. (latest edition)
	-	Human Physiology (An Integrated Approach), D U Silverthorn. (latest edition)
	-	Pharmacology, Lippincott's Illustrated Review. (latest edition)
	-	Basic Pathology, Kumar, W.B. Saunders. (latest edition)
	-	Review of Medical Microbiology and Immunology, Levinson, W. (latest edition)
Recommended books	-	Lehninger Principles of Biochemistry, Lehninger, Nelson and Cox (latest edition)