



**Department of Medical Microbiology**

**College of health science**

**University of Cihan- Sulaimaniya**

**Subject: Clinical Hematology**

**Course Book – Year 2023-2024**

**Lecturer's name Dr. Aveen M. Raouf  
Abdulqader**

# Academic Year: 2023 - 2024

## Course Book

<b>1. Course name</b>	<b>Clinical Hematology</b>
<b>2. Lecturer in charge</b>	<b>Dr. Aveen M. Raouf Abdulqader</b>
<b>3. Department/ College</b>	<b>Medical microbiology/ college of health sciences</b>
<b>4. Time (in hours) per week</b>	<b>4 hours/week</b>
<b>5. Office hours</b>	-
<b>6. Course code</b>	-
<b>7. Teacher's academic profile</b>	<ol style="list-style-type: none"><li>1. Graduated from college of medicine, university of Sulaymaniyah 2003.</li><li>2. Finished residency program in Sulaymaniyah teaching hospitals from 2003-2005.</li><li>3. Joined postgraduate study for high diploma in hematopathology in 2005 and obtained high diploma in hematopathology from ministry of health Kurdistan Regional Governorate in 2007.</li><li>4. From 2008- 2011 worked as specialist hematopathologist in Sulaymaniyah public health laboratory.</li><li>5. At 2012 joined post graduate study for Master in molecular coagulation medicine and obtained MSc in hematopathology from ministry of higher education and scientific research/ college of medicine in 2014.</li></ol>

	<p>6. Since 2014 till 2016 worked as specialist hematopathologist in Sulaymaniyah public health laboratory.</p> <p>7. At 2017 Joined post graduate PhD study in molecular coagulation medicine at ministry of higher education and scientific research/ college of medicine / department of pathology and obtained PhD in Molecular hematopathology in 2019.</p> <p>8. Currently working as specialist hematopathologist in Hiwa hemato-oncology hospital and Sulaymaniyah public health laboratory.</p> <p>9. Currently working as clinical laboratory manager of Mercy clinical Laboratory -Mercy medical city.</p> <p>10. Professions: Blood film and bone marrow morphology, coagulation and thrombosis medicine, blood bank medicine, molecular hematology.</p> <p>11. Teaching at AUIS since January 2021 at the MLS department as an adjunct lab instructor.</p> <p>12. Teaching at Cihan University in Sulaymaniyah since January 2024 at the Medical Microbiology Department as an adjunct lab instructor and lecturer in hematology.</p>
<p><b>8. Keywords</b></p>	<p><b>Erythrocyte, Leucocyte, Plasma, Thrombocyte, Hematopoiesis, Leucopoiesis, Thrombocytes, Hemostasis, Thalassemia, Anemia, Leukemias.</b></p>
<p><b>9. Course overview:</b>  Hematology is the science that deals with the blood, and its structure, function, disease, diagnosis, treatment, and prevention of blood-related disorders. Blood is highly specialized (sterile) connective tissue, which circulates in a closed system of vessels as a liquid with red color.</p>	

## **10. Course objective:**

The aim of this course is to make students familiar with the cell elements and liquid substances (plasma) of blood, the diseases and abnormalities caused by blood-related disorders. Moreover, the students will learn: the main functions of the blood, normal and abnormal sites of blood formation (hematopoiesis), and Hemostasis.

## **11. Student's obligation**

A student has an obligation to respect the ethical standards of **Cihan University** in the following points:

### **A. Class Attendance and responsibilities:**

1. Students are expected to attend each class for the entire semester.
2. If a student arrives more than 15 minutes late or leaves more than 15 minutes early, they will be marked as absent for the whole hour.
3. Students are responsible for material present in lectures.
4. Students will take several quizzes over the course and the quiz marks will be counted toward the final grade. So, try to prepare yourself for quiz every week.

### **B. Penalty and acceptable excuses for class and exam absence:**

1. Only students with official absence, family crises, and illness are excused from class.
2. Three occasions of lateness count as one absence.
3. The student who misses 10 percent of the classes will be placed on probation.

Since all examinations are announced in advance, **ZERO** grade will be given to any missed examination unless a student has an acceptable reason, such as illness, for not being able to take the examination during all those days when the examination was announced.

## 12. Forms of teaching

- The theoretical lectures will be demonstrated utilizing data show, white board and google class in addition to academic discussions in the class.

## 13. Assessment scheme

Midterm Examination Theory	25 %
<b>Paper, Quiz, Project, attendance</b>	5%
<b>Lab quiz, report, attendance, attitude, activity, presentation</b>	20 %
<b>Final Practical Examination</b>	20%
<b>Final theory exam</b>	30%

## 14. Student learning outcome:

At the end of this course student should know:

1. The cell elements and liquid substances of blood.
2. The functions of the blood.
3. The diseases and abnormalities caused by blood-related disorders.
4. The normal and abnormal sites of hematopoiesis.

## 15. Course Reading List and References:

- Turgeon, M.L. (2018), **Clinical Hematology: Theory & Procedures**, (6<sup>th</sup> edition). Wolters Kluwer.
- Hoffbrand, A.V. and Moss, P.A. (2016), **Hoffbrand's Essential Haematology**, (7<sup>th</sup> edition). John Wiley & Sons Ltd.
- Hoffman, R. Benz, Jr. E.J. Silberstein, L.E. Heslop, H. Weitz, J. and Anastasi, J. (2013), **Hematology Basic Principles and Practice**, (6<sup>th</sup> edition). Elsevier Saunders.

## 16. The Topics:

**Theory lectures:**

Lecture No	Topic
1	Haematopoiesis
2	Benign leucocytes disorders
3	Classification of anemia
4	Iron Deficiency anemia
5	Hemolytic anemia I
6	Hemolytic anemia II
7	Megaloblastic anemia
8	Thalassaemia and hemoglobinopathy I
9	Thalassaemia and hemoglobinopathy II
10	Leukaemia
11	Lymphoma
12	Coagulopathies
13	Anticoagulant drugs
<b>Final Examination</b>	

### 17. Peer review

: I certify that:

1. I read and verify all requirements of teaching quality assurance are respected in this course book.
2. The scientific contents are new, convenient and well organized for this stage.
3. The order of chapters is well done.
4. References are new and available for students.

That's why I signed on this course book and I take all responsibilities.

**Name: Aveen M. Raouf Abdulqader**

**Scientific title:** Lecturer

**University:** Cihan University of Sulaimaniya

**College:** Health Sciences / Medical microbiology Department

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**Date:** 15/01/ 2024

Signature:

**Main Lecturer in charge**  
**Dr. Aveen M. Raouf Abdulqader**

**Head of The Department**  
**Dr. Anwar**