Course plan								
<b>Year:</b> 2023-2024	Semester: First Second	Number of students: 50						
Major: MD, MBBS	Basic sciences Physiopathology	Department: Physiology						
Course Title: Physiology of blood	Theoretical Practical	Credit: 0.3						
Prerequisite: none	Day & Time: Tuesday, 10-11 A.M.	Place: Tadbir						
Instructor: Dr. Ghasemi	Office address: School of Medicine, Department of physiology	<b>Tel:</b> 031-3792 9188						
Email: ghasemi.m.ph@gmail.com	<b>Response Hours and Days:</b> 13-16 p. m Tuesday	Student representative name and mobile number:						

Main objective: Understanding the basic function of blood in our body.

## **Specific objects:**

- 1- Plasma and the Cellular Elements of Blood (Familiarity with the composition of plasma and the major functions of plasma)
- 2- Blood Cell Production
- 3- Red Blood Cells (the structures of immature and mature red blood cells, the molecular structure of Hemoglobin, iron metabolism, the common pathologies of red blood cells.)
- 4- Platelets (the production, structure, and functions of platelets)
- 5- Hemostasis and Coagulation (hemostasis and coagulation, the key steps of hemostasis, coagulation, and fibrinolysis)

# **References (Text books):**

- 1- Guyton and Hall Textbook of Medical Physiology, (The latest version of the book)
- 2- Principles of Hofbrand Hematology (The latest version of the book)
- 3- Medical Physiology: Principles for Clinical Medicine, edited by Rodney A. Rhoades, David R. Bell

### Student evaluation and the value related to each evaluation:

(The assessment tools that will be used to test student ability to understand the course material and gain the skills and competencies stated in learning outcomes)

ASSESSMENT TOOLS		
Class activities and quiz	2	
Final Exam (Written and Multiple-choice questions)	18	
TOTAL MARKS	20	

### Students' responsibilities:

- 1- Study the topics before and after the class
- 2- Observe the class order and rules
- 3- Attend all classes

### **Discipline and educational rules:**

- 1- For each unplanned absence, 0.5 points will be deducted from 20, and in case of absence exceeding the permissible limit, the score will be zero.
- 2- The maximum permission time to participate in the class is 5 min after the start.
- 3- Mobile phone use is prohibited during class.

Other important notes for students:

1- Studying the rules and rights of the professor and the student

Mid exam date: In accordance with the schedule

Final exam date: In accordance with the schedule

Row	date	Presentation	Торіс	Professor	Theoretical or practical	References	Chapter	Pages
1	March 30	In person	General principles and structure of blood, hematopoiesis, erythropoiesis and the importance of erythropoietin	Dr. Ghasemi	Theoretical	Textbook of Medical Physiology (Guyton and Hall)	33	439- 442
2	April 7	In person	Structure and function of erythrocytes and Metabolic activity of erythrocytes	Dr. Ghasemi	Theoretical	Textbook of Medical Physiology (Guyton and Hall)	33	442
3	April 14	In person	Hemoglobin production, Iron metabolism, catabolism or destruction of red blood cells, anemia, polycythemia and their effect on circulatory function	Dr. Ghasemi	Theoretical	Textbook of Medical Physiology (Guyton and Hall)	33	443- 447
4	April 21	In person	Hemostasis and platelet function	Dr. Ghasemi	Theoretical	Textbook of Medical Physiology (Guyton and Hall)	37	477- 479
5	April 28s	In person	studying coagulation and anti-coagulation pathways	Dr. Ghasemi	Theoretical	Textbook of Medical Physiology (Guyton and Hall)	37	480- 488