

Course Specification

University: Menoufiya

Faculty: Science

Course Specifications:

Programme (s) on Which the Course is Given: Diploma of Hematology

Major or Minor Element of Programmes: Major

Department offering the Program: Zoology

Department offering the Course: Zoology

Academic Year/ Level: -----

Date of Specification Approval: 2013

A- Basic Information

Title: Physiology of blood and circulation

Code: Z510

Credit Hours: 2

Lecture: 2

Tutorial: 0

Practical: 0

Total: 2

B- Professional Information

1- Overall Aims of the Course: By the end of this course, the student should be able to

- * Understand the structure and functions of the blood.
- * Understand the formation of red blood corpuscles.

* Understand the causes and development of some haematologic diseases like different types of

anemia.

* Understand of some important definitions in the field of circulation

2- Intended Learning Outcomes of Course (ILOs):

a- Knowledge and Understanding:

a1- Define the haemopoietic organs.

a2- Describe the blood formation.

a3- Know some haematologic phenomena and mechanisms.

a4- Understand of some important definitions in the field of circulation

b- Intellectual Skills:

b1- Measure the student capability to identify the structure and functions of blood components.

b2- Define the blood formation inside the body.

b3- Understand of some important definitions in the field of circulation

c- Professional and Practical Skills:

c1- Determine student capability to identify the structure and functions of blood components

d- General and transferable Skills:

d1- Measure the scientific writing ability.

d2- Utilize the oral communication skills.

d3- Use the appropriate technology such as (Internet) for scientific research.

3- Contents

Topic	No. of Hours	Lecture	Practical
- Blood plasma :chemical constituents and functions .	2	1	
Red blood cells: origin, morphology , characters, fate and functions. -	2	1	
-White blood cells: Types and morphology as well as functions of each type.	4	2	
- Thrombocytes : characters and functions.	2	1	
-Blood transfusion and blood groups.	2	1	

-The general blood circulation.	2	1	
-Structures of the heart.	2	1	
-Physiology of the heart and cardiac metabolism.	2	1	
-Conduction system.	2	1	
-The general blood circulation.	2	2	

4- Teaching and Learning methods

4.1-Lectures.

4.2-Oral presentation.

4.3- Research assignment.

4.4-Practical demonstration.

5- Student assessment methods

5.1-Reports to assess Collection of course material.

5.2- Mid-term exam to assess Mid-term performance.

5.3-Practical and oral exam to assess practical skills.

5.4-Final term exam to assess end of course performance.

Assessment schedule

Assessment1 Mid term Week

Assessment2 semester activities Week 5 and 8

Assessment3 final term practical exam Week 13

Assessment4 final term exam Week 14

Weighting of assessments

Mid-Term Examination	20 %
Final-Term Examination	40%
Oral Examination	10%
Practical Examination	20%
Semester Work	10%
Other Types of Assessment	0%
Total	100%

6- List of references

6.1- Course book

* Textbooks of Hematology.

* Textbook of Physiology.

6.2- Recommended books

* Essentials of Hematology.

* General Biochemistry & Hematology.

7-Facilities required for teaching and learning:

* Lecture room provided with a white board.

* Dark room equipped with overhead and slide projectors, data show.

Course coordinator: Prof. Dr. M. F. F. Bayomy

Head of Department: Prof. Saber Sakr

Date: 15/1/ 2013