

**University of Tikrit**  
**College of nursing**  
**Basic Nursing Sciences**



**Second year 2023/2024**

**Parasitology**

**By:**

**Dr. Noor Talal Al-Safee**

## **Introduction**

Welcome to the Second Year-Semester Two in the General Nursing Program:

**Course: Medical Microbiology II**, is one of the Nursing course for the general nursing curriculum. The syllabus attached is designed to provide each student with an explanation to the course content. Unite objective are required reading materials for the course.

### **Instructions for use of Student's Course Books**

- Each Class Session identifies the content that will be covered in that class and the activities expected by the students.
- During the Class Session, ask for explanations of term that are not clear.
- You are advised to participate in class room discussion.
- You are advised to complete she study Questions given at the end of each unit that will help you to fully understand the course material.
- You are advised to complete the laboratory requirements for this course.

### **Course Overview**

#### **Medical Microbiology (11)**

1. **Course Title: Microbiology (11)**

2. **Course Number:** Course ( 2 )2012-2013 Microbiology (11)

3. **Credit Hours:**

Total ( 3 ) credits:

Theory ( 2 ) credits Lab. ( 2 ) credits Clinical (1) credits

4. **Course Calendar:**

Total (4) hours weekly of (15) weeks:

Theory (2) hrs. Lab. (2)

5. **.Placement:** Second Year / Second semester

6. **Course Description:**

This course is designed to provide the nursing students with basic theoretical and laboratory knowledge in microbiology

**Parasitology** (parasites), **Virology** , (Viruses) **Mycology** (Fungi),.

The theoretical knowledge is: Introduction,

the biology of microorganisms, , viruses and pathogenic viruses, fungi and pathogenic fungi.

## 7. Course Objectives:

At the end of the course the student will be know:

1. The types of microorganisms/ **Parasitology** (parasites), **Virology**, (viruses) **Mycology** (Fungi), **Hospital acquired infection** the cause infectious diseases, general description of
2. diagnostic methods and interpretation of the laboratory findings in order to make the ultimate diagnosis.
3. How to use the microscope and the slide preparation processes.
4. Collection of clinical specimens and disposal of contaminated materials.

## 8. Course Outline:

### Part I: Parasitology

#### 1.1. Introduction to Parasitology Host-parasite relationship

Classification of parasites Protozoa and flagellates

#### 1.2. Protozoa

Entameobahistolytica, Entamoebacoli (Morphology, habitat, epidemiology, pathogenesis, methods of transmission, diagnosis, control and treatment) Intestinal flagellates.

Giardia lamblia (Morphology, habitat, epidemiology, pathogenesis, methods of transmission, diagnosis, control and treatment)

#### 1.3. Atrial flagellates

Trichomonas vaginalis (Morphology, habitat, pathogenesis, methods of transmission, diagnosis and treatment)

#### 1.4. Tissue flagellates

*Leishmania spp.* (Morphology, habitat, epidemiology, and pathogenesis, methods of transmission, diagnosis, control and treatment for each species).

## 1.5. Sporozoa

Plasmodium spp. (Morphology, habitat, epidemiology, pathogenesis, methods of transmission, diagnosis, control and treatment)

Toxoplasma gondii (Morphology, transmission, pathogenesis, diagnosis, control and treatment)

## 1.6. Helminthes

Cestoda taeniasagenata, Hymenolepis nana and Echinococcus granulosus (Morphology, habitat, epidemiology, Pathogenesis, methods of transmission, diagnosis, control and treatment).

## 1.7. Trematoda

1.7.1. Schistosoma haematobium, Schistosoma mansoni, Schistosoma japonicum (Morphology, habitat, epidemiology, pathogenesis, methods of transmission, diagnosis, control and treatment)

### 1.7.2. Nematoda

Ascaris lumbricoides, Ancylostoma duodenale, Trichuris trichura, Enterobius vermicularis (Morphology, habitat, epidemiology, pathogenesis, methods of transmission, diagnosis, control and treatment).

## **Part II: first exam Part III: Virology**

### **3.1. General properties of viruses:**

Viroids, Prions

### **3.2. Classification of viruses:**

Viral Genetics, Multiplication of viruses, Viruses Effects on Cells, Viral Pathogenesis

### **3.3. Persistent Viral Infections:**

Common routes of viral infection in human Influenza Viruses (Important Properties, Transmission and Epidemiology, Pathogenesis, Clinical Findings, Laboratory Diagnosis, Treatment and Prevention).

### **3.4. Measles virus:**

(Important Properties, Transmission and Epidemiology, Pathogenesis, Clinical Findings, Laboratory Diagnosis, Treatment and Prevention)

Mumps virus (Important Properties, Transmission and Epidemiology, Pathogenesis, Clinical Findings, Laboratory Diagnosis, Treatment and Prevention) Rubella (Important Properties, Transmission and Epidemiology, Pathogenesis, Clinical Findings, Laboratory Diagnosis, Treatment and Prevention).

### **3.5. AIDS:**

(Important Properties, Transmission and Epidemiology, Pathogenesis, Clinical Findings, Laboratory Diagnosis, Treatment and Prevention).

### **3.6. Rotaviruses:**

(Important Properties, Transmission and Epidemiology, Pathogenesis, Clinical Findings, Laboratory Diagnosis, Treatment and Prevention)

Human Cancer Viruses (General Features of Viral Carcinogenesis, Multistep Carcinogenesis)

Hepatitis A Virus:

(Important Properties, Transmission and Epidemiology, Pathogenesis, Clinical Findings, Laboratory Diagnosis, Treatment and Prevention).

#### **Hepatitis B Virus:**

(Important Properties, Transmission and Epidemiology, Pathogenesis, Clinical Findings, Laboratory, Diagnosis, Treatment and Prevention)

#### **Hepatitis C Virus:**

(Important Properties, Transmission and Epidemiology, Pathogenesis, Clinical Findings, Laboratory Diagnosis, Treatment and Prevention).

#### **Hepatitis D Virus :**

(Important Properties, Transmission and Epidemiology, Pathogenesis, Clinical Findings, Laboratory Diagnosis, Treatment and Prevention).