**Course plan**

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| **Year:** 1404-1405 | **Semester:** ☐First, ■Second, ☐Summer | **Number of students:5** |
| **Major:** Master students of Medical Parasitology | ■ Basic sciences, ☐ Physiopathology | **Department:** Parasitology, Mycology & Entomology |
| **Course Title:** Medical Protozoology 2 | ☐Theoretical, ■ Practical | **Credit:** **Code N.:** |
| **Prerequisite:** Medical Protozoology 1 | **Day & Time:** | **Course type:** Theoretical |
| **Instructor:** | **Office address:** | **Tel:** 038-33335635 |
| **Email: saedi1358@gmail.com** | **Response Hours and Days: 34 hours** | **Student representative name and mobile number:** |

**Main objective:** Understanding the theoretical aspects of blood and tissue protozoa pathogenic to humans and common infections between humans and animals , Classification, morphological characteristics, medical and health importance, epidemiology, geographical distribution and modes of transmission of parasites, evolutionary history, The role of parasites in causing common infections between humans and animals, pathogenesis, laboratory diagnostic methods, principles of control, prevention, and treatment, Diseases caused by the protozoa in question. Finally, explaining advanced concepts and understanding of blood and tissue protozoa

On completion of this course, the student will be able to:
1- Name blood and tissue protozoa, classify them, and explain their medical and health importance.
2- Describe the general characteristics, morphology, and physiology of blood and tissue protozoa.
3- Name the geographic distribution centers of blood and tissue protozoa and explain the epidemiology of the diseases caused by them.
4- Describe the evolutionary process of human blood and tissue protozoa and draw it in a diagram and identify the infectious, pathogenic, and diagnostic stages of the parasite in the external environment and in the host body.
5- Describe the pathogenic mechanisms of the protozoa in question and the pathology caused by them.
6- Name the clinical signs and complications caused by the protozoa in question and explain the host's immune mechanisms against them.
7- Name the methods for diagnosing diseases caused by the protozoa in question.
8- Name the most common drugs used in the treatment of diseases caused by them.
9- Explain the methods of control and prevention of diseases caused by the protozoa in question.

**References (Text books):**
1. Schmidt G.D; Roberts L.S. Foundations of Parasitology.8th Edition. 2010. McGraw Hill Company. Boston .USA
2. Cox FEG;Wakelin D ; Gillespie SH ; Despommier DD. Topley and Wilson's Microbiology and Microbial infections.10th edition.2005,Vol. 5.0,Hodder Arnold, London. Great Britain.

**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 | From |
|---|---|
| **Assignments** | 1 |
| **Quiz** | 1 |
| **Presence in online courses** | --- |
| **Midterm Exam** | 8 |
| **Final Exam (Written exam)** | 10 |
| **TOTAL MARKS** | **20** |

**Students responsibilities:**

It is applied according to the regulations of the educational regulations, Regular class attendance

| Row | date | Time | Topic | Professor | References | Chapter | Pages |
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| **1** | 20.09.2025 | 8-10 | Getting to know the students, introducing the course and how it is held, students' duties, and reviewing common concepts and terms and generalities of medical parasitology in the field of blood and tissue protozoa. | Dr saedi | Foundations of Parasitology, Topley and Wilson's Microbiology | | |
| **2** | 27.09.2025 | 8-10 | Introduction to the structural characteristics, physiology, and classification of protozoa of the genus Plasmodium. | Dr saedi | Foundations of Parasitology, Topley and Wilson's Microbiology | | |
| **3** | 04.10.2025 | 8-10 | Continued discussion of parasites that cause human malaria, life cycle, morphological forms and epidemiology of the disease in Iran and the world | Dr saedi | Foundations of Parasitology, Topley and Wilson's Microbiology | | |
| **4** | 11.10.2025 | 8-10 | Malaria drug treatments and drug resistance | Dr saedi | Foundations of Parasitology, Topley and Wilson's Microbiology | | |
| **5** | 18.10.2025 | 8-10 | Introduction to the structural characteristics, physiology, and classification of protozoa of the genus Babesia | Dr saedi | Foundations of Parasitology, Topley and Wilson's Microbiology | | |
| **6** | 25.10.2025 | 8-10 | Familiarity with the structural characteristics, physiology, and classification of protozoa of the genera Theileria, Hemoproteus, and... | Dr saedi | Foundations of Parasitology, Topley and Wilson's Microbiology | | |
| **7** | 01.11.2025 | 8-10 | Familiarity with the structural characteristics, physiology, and classification of other blood and tissue protozoa | Dr saedi | Foundations of Parasitology, Topley and Wilson's Microbiology | | |
| **8** | 08.11.2025 | 8-10 | Introduction to the structural, physiological, and classification characteristics of protozoa of the genus Leishmania, the causative agents of cutaneous and mucocutaneous leishmaniasis. | Dr saedi | Foundations of Parasitology, Topley and Wilson's Microbiology | | |
| **9** | 15.11.2025 | 8-10 | Introduction to the structural, physiological, and classification characteristics of protozoa of the genus Leishmania, the causative agent of visceral leishmaniasis. | Dr saedi | Foundations of Parasitology, Topley and Wilson's Microbiology | | |
| **10** | 22.11.2025 | 8-10 | Introduction to the structural characteristics, physiology, and classification of protozoa of the genus Leishmania. | Dr saedi | Foundations of Parasitology, Topley and Wilson's Microbiology | | |
| **11** | 29.11.2025 | 8-10 | Introduction to the structural characteristics, physiology, and classification of protozoa of the genus Toxoplasma | Dr saedi | Foundations of Parasitology, Topley and Wilson's Microbiology | | |
| **12** | 06.12.2025 | 8-10 | Continue reading about Toxoplasma gondii | Dr saedi | Foundations of Parasitology, Topley and | | |

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| | | | | | Wilson's Microbiology | | |
| **13** | 13.12.2025 | 8-10 | Introduction to the structural characteristics, physiology, and classification of protozoa of the genus Sarcocystis | Dr saedi | Foundations of Parasitology, Topley and Wilson's Microbiology | | |
| **14** | 20.12.2025 | 8-10 | Diagnostic features and immunological issues related to blood and tissue protozoa | Dr saedi | Foundations of Parasitology, Topley and Wilson's Microbiology | | |
| **15** | 27.12.2025 | 8-10 | Familiarity with molecular methods used in the diagnosis and research processes of the parasites mentioned in previous sessions | Dr saedi | Foundations of Parasitology, Topley and Wilson's Microbiology | | |
| **16** | 03.01.2026 | 8-10 | Student seminar | Dr saedi | | | |
| **17** | Based on the program | | Final exam | | | | |