

Theoretical and practical course plan form - Ilam University of Medical Sciences

Introduction of Malaria Studies Second Semester /2020-2021

* School: Paramedical

* Department: Medical Parasitology

* Course Name: Malaria

* Field of Study: Biology and Carrier Control - Bachelor

* Day and time: Monday 12-10

* Venue: Faculty of Health and Parasitology Laboratory

* Name of the person in charge of the course (course instructor): Dr. Nahid Maspi- Dr. Hamid Hassanpour

* Prerequisite courses: -

* Office address: Deputy of Education - Center for the Study and Development of Medical Education - Phone 32223083

General objectives of the course:

Learn methods for diagnosing parasitology and morphological characteristics of different stages of protozoa

1. Behavioral goals Theoretical and practical lessons (behavioral goals have an audience, behavioral verb, degree and criteria and conditions of performance).

1. The student is expected to name the species of human Plasmodium

2. The student is expected to be able to fully describe the malaria life cycle by mentioning the hosts

3. The student is expected to be able to describe the morphological characteristics of four important species of human Plasmodium

4. The student is expected to be able to describe the pathogenesis and clinical signs of malaria

5. The student is expected to be able to explain the geographical spread of malaria with emphasis on the epidemiology of the disease in the country.

6. The student is expected to be able to describe ways to diagnose malaria.

7. The student is expected to be able to describe the treatment of malaria

8. The student is expected to describe methods of preventing and controlling malaria

Practical part

2. The student is expected to be able to adjust Plasmodium-related extensions under a microscope
3. The student is expected to identify different forms of Plasmodium falciparum (ring, micro and macrogamocytes) by mentioning the morphological characteristics under a microscope.
4. The student is expected to identify different forms of Plasmodium vivax (ring, trophozoite, immature and mature schizont, and micro and macrogamocytes) by mentioning the morphological characteristics under a microscope.
5. The student is expected to identify different forms of Plasmodium ovale (ring, trophozoite, immature and mature schizont, and micro and macrogamocytes) by mentioning the morphological characteristics under a microscope.
6. The student is expected to identify different forms of Plasmodium malaria (ring, trophozoite, immature and mature schizont, micro and macrogamocytes) by mentioning the morphological characteristics under a microscope.

1- Student duties (student homework during the semester):

- 2- The student must be active and regular in the classes.
- 3- The student is obliged to observe ethical principles and educational regulations.
- 4- The student should be able to answer the questions posed in writing and orally in class.
- 5- The student should be able to identify different microscopic shapes in the laboratory and perform the assigned tasks.

• **Main sources** (by observing the principles of source writing and giving addresses for their preparation, including library, bookstore, internet ...)

1. Gholamhossein Adrisian, Mostafa Rezaian, Mehdi Ghorbani, Hossein Keshavarz, Mehdi Mohabeli, Medical Protozoan, University of Tehran Press, First Edition, 2007
2. Ismail Saebi, Parasitic Diseases of Iran, Protozoan Diseases, Fourth Edition, Eighth Edition, Aiz Publications, Tehran, 2007.
3. Mohammad Javad Gharavi, Comprehensive Medical Protozoa, Third Edition, Tayeb Publishing
4. Lawrence Ash, Thomas O'Reilly, Laboratory Methods for Diagnosis of Parasites (Translation: Dr. Emad Changizi, Dr. Mohammad Reza Salimi Bejestani, Hooman Ronaghi), First Edition, Semnan University Press, 2011
- 5- Methods of diagnosis of parasitic diseases, Dr. Houshang Khazan and Safoura Sadegh Hassani, first edition, Gohar Manzooom Publications, 2004

Teaching method and teaching aids used: Teaching at the beginning of the class in the form of lectures, questions and answers with the help of PowerPoint, magic and blackboard and showing some animations and for the practical part of educational slides and performing practical techniques according to protocols Standard is used.

3. Methods and time of assessment and evaluation of the student and the bar related to each assessment: (Type of exams in terms of how to design a question - loading - time of exams and assignments to be mentioned)

- Written exam of the topics related to the course is held in the form of four-choice questions and short descriptive answers (5 points)
- The practical part is tested stationarily and the microscopic specimens are identified (2.5 points).

Educational content:

This course is worth 0.75 units (0.5 theoretical units and 0.25 practical units including 4 theoretical sessions and four practical sessions).

Theory:

Session 1: Introduction, history, evolution of malaria, characteristics of malaria blood forms

Session 2: Pathogenicity and symptoms, methods of diagnosis, immunity and malaria vaccines

Session 3: Treatment methods for malaria, prevention

Session 4: Epidemiology and Malaria Survey in an Area

Practical:

Session 1: Morphology of Plasmodium blood forms, observation and study of different forms of Plasmodium falciparum

Session 2: Observation and evaluation of different forms of Plasmodium vivax (Ring, trophozoite, immature and mature schizont and micro and macrogamocytes)

Session 3: Observation and evaluation of different forms of Plasmodium malaria (Ring, trophozoite, immature and mature schizont, micro and macrogamocytes)

Session 4: Observation and evaluation of different forms of Plasmodium ovale (Ring, trophozoite, immature and mature schizont, micro and macrogamocytes)