



Department of Biology

College of Science

University of Salahaddin/Erbil

Subject: Parasitology

Course Book – Year 2 (General biology)

Theory Lecturer's name:

Assist. Prof. Dr. Sherwan T. Ahmed

Practical Lecturer's name:

Dr.Fenik Sherzad Huseen

Academic Year: 2021/2022

Ministry of Higher Education and Scientific research

Course Book

Department of Biology

College of Sciences

University of Salahaddin

Subject: Practical parasitology 2nd semester

Course Book – (Year 2) (General biology)

Dr. Fenik Sherzad Huseen

Academic Year: 2021/2022

Course Book

Department of Biology

College of Sciences

University of Salahaddin

Subject: Practical parasitology 2^{sd} semester

Course Book – (Year 2) (General biology)

Dr. Fenik Sherzad Husein

Academic Year: 2021/2022

1. Course name	General parasitology
2. Lecturer in charge	Dr. Fenik Sherzad Husein

3. Department/ College	Biology/Sciences
4. Contact	Fenik.hussen@su.edu.krd: fenik_aya@yahoo.com Tel: 009647504862671
5. Time (in hours) per week	Practical: 2 hrs
6. Office hours	20-25 hrs.
7. Course code	SBio101
8. Teacher's academic profile	<ul style="list-style-type: none"> • I(Fenik Sherzad Hussen) graduate from Salahaddin University in 2000 (Ranked 8th in collage) worked as assistant biology for 2 years and assist in practical microbial physiology lab., practical medical microbiology lab., practical food microbiology lab. In 2006 I finished my MSc degree and start as Assistant Lecturer Teaching Practical parasitology, invertebrate, zoology and microbial physiology. • I have been teaching parasitology, I have 7 published paper • I am starting PhD study in 2017 in biology department • I have PhD in 2021

<p>9. Keywords</p>	<p>Parasitology, medical parasite, classification of parasite and lifecycle, protozoan parasite and helminthes.</p>
<p>10. Course overview: Parasitology is a dynamic field because the relationships between parasites and their hosts constantly are changing. Parasitism comprises an ecological relationship between two individuals of different species where the parasite's environment is another living organism. Unlike the environment of free-living plants and animals, the environment of the parasite can fight back. Parasites and hosts are locked into a continuous struggle for survival, and understanding the mechanisms that each side in this battle use to gain advantage challenges parasitologists to understand biological phenomena at the cutting edge of a wide variety of scientific disciplines. As a result, parasitologists contribute significantly to our basic understanding of the way our biological world functions.</p>	
<p>11. Course objective: The course will cover different pathogenic and non-pathogenic parasites (protozoa and helminthes) infecting human specially and some of their domestic and wild animals in generally.</p> <p>The course including necessary information on various aspects of parasitic infection, geographical distribution of parasites, nomenclature, classification, morphology, lifecycle, information on parasitic disease, their transmission and spreading, parasite diagnosis, prevention and control.</p> <p>.</p>	
<p>12. Student's obligation</p> <p>The student's attendance the class, exams and seminars and other activity like collecting sample.</p>	
<p>13. Forms of teaching</p> <p>The course will cover different pathogenic and non-pathogenic parasites (protozoa and helminthes) infecting human specially and some of their domestic and wild animals in generally.</p> <p>a. The course including necessary information on various aspects of parasitic infection, geographical distribution of parasites, nomenclature, classification, morphology, lifecycle, information on parasitic disease, their transmission and spreading, parasite diagnosis, prevention and control. For illustrating clinical photos of patients infecting with parasites and the damages which caused by them in or outside the host tissues.</p>	

b. **To get best knowledge on the parasite life cycle.**

<p>c. For illustrating clinical photos of patients infecting with parasites and the damages which caused by them in or outside the host tissues.</p> <p>d. To get best knowledge on the parasite life cycle.</p> <p>1. Classroom discussion will have done about the studied parasite including life cycle, transmission, information on its pathogenesis, and pathology, clinical manifestation diagnosis which including clinical diagnosis and laboratory diagnosis, treatment, prevention, and control.</p>	
<p>14. Assessment scheme</p> <p>I assessments the student through attendance in the class, course exams, quizzes and seminars or presentation the subjects that have relations with the parasite.</p>	
<p>15. Student learning outcome:</p> <p>This course provides students an understanding of important human parasitic diseases, including their life cycles, vectors of transmission, distribution and epidemiology, pathophysiology and clinical manifestations, treatment, and prevention and control.</p>	
<p>16. Course Reading List and References:</p> <p>To prepare the subjects I using Text book of parasitology, medical parasite, Diagnosing Medical Parasites, Text Book of Medical Parasitology..etc., journals about the subjects by using internets.</p>	
17. The Topics:	Lecturer's name

<ul style="list-style-type: none"> -introduction to the protozoology and class sarcodina . -class:mastigophora with important parasite of the class. -continue of mastigophora human parasite of the class. -class:ciliophora with examples. -class:sporozoa with examples. - Slides of all <i>Plasmodium</i> sp. stages. -helminthes phylum:platehelminthes. -class: trematoda and liver flukes . -intestinal flukes . -lung flukes. -blood flukes. -class:cestoda. 	<p>Dr. Fenik Sherzad Husein</p> <p>(2 hrs) for each class</p> <p>2nd stage</p>
--	---

<ul style="list-style-type: none"> -phylum: Nematelminthes -class:nematoda <i>-Practical methods in Parasitology</i> 	
18. Practical Topics (If there is any)	
<ul style="list-style-type: none"> -General Stool Examination (GSE) for isolation of intestinal parasite - Detection of Blood Parasites - Examination of skin scrapings for ecto parasite -General examination of urine for detection of parasite 	<p style="text-align: center;">Fenik Sherzad Husein</p> <p>(2 hrs) for each class</p> <p>2nd stage</p>
<p>19. Examinations:</p> <p style="text-align: center;">For the exam uses move system, and include different questions as true and false, blanks, define, describe and identify the slides and parasite specimens.</p>	
<p>20. Extra notes:</p> <p style="text-align: center;">This subjects need scientific trips to see some fresh sample and learning identification of the parasite and fine the new record of parasite especially in our city.</p>	
<p>21. Peer review</p> <p>This course book has to be reviewed and signed by: Dr. Sherwan T. Ahmed and Dr. Narmeen R. Hamad</p>	

19. Examinations:

1. Compositional:

Q/Describe the function of each of the following structures/cell types. a. mastax in rotifers

b. gastrovascular cavity in *Hydra*

c. pinacocytes in poriferans

2. Multiple choices:

Q/1- A cell type that you would not expect to find in the gastrodermis of a hydrozoan would be a: a) nematocyst

b) mucus cell

c) photosynthetic cell

d) nutritive-gland cell

2- Cephalopods are important molluscs that include:

a. Snails, slugs and limpets

b. Ammonites, squid and nautiloids

c. Cockles, mussels and clams

20. Extra notes:

21. Peer review

I have read this course book and I see that it contains the most necessary subjects.....

Assist.Prof. Narmin Rafiq Hammad