
Entomology and Protozology

Benha University

Faculty of Veterinary Medicine

Program on which the course is given: **Bachelor of Veterinary Medical Sciences**

Department offering the course: **Department of Parasitology**

Academic year / Level : **Third Year, 2nd semester**

Date of specification approval: Ministerial decree No. 921 on 15/ 9/ 1987 (approved in this template by the Department Council on 13/ 2/ 2009)

A- Basic Information

Title: Entomology and Protozology Code: Vet 00634b

Lecture: 3 hours/week

Practical: 4 hours/week

Total: 7 hours/week

B- Professional Information

1 – Overall Aim of the Course:

Is to Study the morphology, life cycle, pathogenesis, diagnosis, control, immunity and treatment of most important insect, crustacea, archnida and protozoa affecting animals, birds and fish.

2- Intended Learning Outcomes of the Course (ILOs)

a- Knowledg and Understanding:

- After successful completion of the course the students should be able to:
- a.1- Mention the medical importance of arthropods, archnida and protozoa.
 - a.2- Classify and list veterinary important insect, crustacea, archnida and protozoa.
 - a.3- Illustrate the morphological characters and life cycle of veterinary important arthropods, archnida and protozoa.
 - a.4- Tell the medical importance of arthropods, archnida and protozoa , methods of diagnosis and control.

b- Intellectual Skills:

- After successful completion of the course the students should be able to
- b.1- Identify insect, crustacea, archnida and protozoa with their stages.
 - b.2- Collaret the clinical and pathogenesis signs with parasitic infections.

c- Professional and Practical Skills:

- After successful completion of the course the students should be able to
- c.1- Identify fixed samples of insect, crustacea, archnida parts on slide microscope and TV monitor.
 - c.2- Identify the morphology of arthropods preserved in boxes.
 - c.3 -Identify fixed samples of protozoa on slide microscope and TV monitor.

d- General and Transferable Skills:

After successful completion of the course the students should be able to

d.1- Control medically important arthropods.

d.2- Solve endemic protozoal problems.

d.3- Identify diagnostic stages of arthropods and protozoa.

3- Contents

Topic	No. of hours	Lecture	Tutorial/Practical
Entomology			
Introduction	2	2	-
Insects	28	12	16
Arachnids	15	7	8
Fish crustacea	6	2	4
Immunity for Arthropods	1	1	-
Protozoa	-	-	-
Introduction	2	2	-
Flagellates	14	6	8
Entamoeba	10	2	8
Apicomplexa	19	7	12
Fish protozoa	6	2	4
Immunity of protozoa	2	2	-
Total	105	45	60

4- content-ILOs matrix

Content	ILOs			
	Knowledge and understanding	Intellectual	Professional and practical	General and transferable
Entomology Introduction	A1	B1	C1	D2
Insects	A1,2,3,4	B1	C1	D1,2
Arachnids	A1,2,3,4	B1	C1	D1,2
Fish crustacea	A1,2,3,4	B1	C1	D1
Immunity for Arthropods	A1,2,3,4	B1	C1	D1
Introduction for Protozoa	A1,2,3,4	B1	C1	D1
Flagellates	A1,2,3	B1	C1	d1



Entamoeba	A1,2,3	B1	C1	d1
Apicomplexa	A1,2,3,4	B1	C1	D1
Fish protozoa	A1,2,3,4	B1	C1	D1
Immunity of protozoa	A1,2,3,4	B1	C1	D1

5- Assessment-ILOS matrix

Assessment	ILOS			
	Knowledge and understanding	Intellectual	Professional and practical	General and transferable
Mid-term exam.	√	√	√	×
Final term Exam.	√	√	√	√
Oral Exam.	√	√	√	√
Practical Exam.	√	√	√	√
Semester Work√√	√	×	×	√

6-Teaching and Learning Methods:

- 4.1-Over head projector.
- 4.2-Domenstration of prepared slides by monitor
- 4.3-Domenstration of prepared slides by light microscope

7- Student Assessment Schedule

- 5.1- Mid-term exam to assess knowledge, intellectual and general skills.
- 5.2- Practical exam to assess professional skills and diagnosis of helminthes.
- 5.3- Written exam to assess the ability of knowledge and intellectual skills.
- 5.4- Oral exam to assess the ability of the student for discussion and analysis.

Assessment Schedule

Assessment 1	Mid-term Exam	week...7 th	
Assessment 2	Practical Exam	week...13 th	
Assessment 3	Written Exam	week...15 th	15 th
Assessment 4	Oral Exam	week....15 th	15 th



Weighting of Assessments

Midterm Examination	5%
Practical Examination	15%
Final Term Examination	50%
Oral Examination	20%
Semester Work	5%
Other types of assessment	5%
Total	100%

8- List of References

8.1-Course Note:

- a-General Veterinary Helminthology.
- b- Practical Helminthology.

8.2- Essential Books (Text Books)

- a-Helminthes, Arthropods and Protozoa of Domesticated Animals, Solusby, (1986)
- b-Veterinary Protozoology , Levine (1985)
- c-Immunity to Parasites, Derek Wakelin, (1984)

8.3- Recommended books

8.4- Periodicals, Web sites.....etc

9- Facilities Required for Teaching and Learning

- 9.1-Advanced light microscope
- 9.2- Research microscope
- 9.3- Data show
- 9.4- Computer
- 9.5- P.M room
- 9.6- Experimental animals

Course Coordinator:

Prof. Dr. Lobna El Aqbawey

Head of the Department

Prof. Dr. Lobna El Aqbawey

Date: 9/1/2011