هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission
اعتماد
NCAAA
2024
TP-153

Course Specification
(Bachelor)

Course Title:	Parasitology
Course Code:	BIOL 335
Program:	Biology
Department:	Biology
College:	College of Science
Institution:	Majmaah University
Version:	third
Last Revision Date:	22/December /2023

Table of Contents

A. General information about the course:

1. Course Identification

1. Credit hours: 3 (2 + 2)					
ECTS credits = 4.5					
2. Course type					
A.	☐University	☐College	☒ Department	☐Track	☐Others
B.	☒ Required		☐Elective		
3. Level/year at which this course is offered: (6thlevel / 3th Year)					
4. Course General Description:					
This course deals the basics of parasitology, the types of parasites, types of hosts and symbiotic relationships with other organisms. Furthermore, throw the light on some of the important parasites such as protozoa (*Entamoeba histolytica , Giardia lamblia, Trichomonas vaginalis, Trypanosoma .sp , plasmodium sp* etc., and multicellular parasites such as worms (Trematodes (Flukes), Nematodes and Cestodes) and arthropods. This course also deals with parasitic infections in humans and animals.					
5. Pre-requirements for this course (if any)**:**					
Invertebrates Biology, BIOL 212					
6. Co-requisites for this course (if any)**:**					
NA					
7. Course Main Objective(s):					
Student will be able to classify parasites and identify their life cycles, methods of infection, diagnostic methods , prevention and treatment of parasitic diseases.					

2. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	60	91%
2	E-learning	6	9%
3	Hybrid • Traditional classroom • E-learning	0	0
4	Distance learning	0	0

3. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	**Lectures**	30
2.	**Laboratory/Studio**	28
3.	**Field**	
4.	**Tutorial**	
5.	**Others (specify)**	2
Total contact hours		60

Workload (based on the academic semester)

No	Activity	Work Load /Hours
1.	**Contact hours**	60
2.	**Self-study (Assignments, quizzes, reports, Discussions, Library, research)**	60
	Total Workload	120
Equivalent to **ECTS credit points**		**4.5**

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of PLOs aligned with the program	Teaching Strategies	Assessment Methods
1.0	**Knowledge and understanding**			
1.1	Describe parasites in terms of distribution, morphological characteristics, life cycle, pathogenesis, diagnostic techniques and how to resist and avoid infection.	K3	Lectures Group discussions	Quizzes, Midterm and final exams Electronic exam
2.0	Skills			
2.1	Discuss the different phases of parasites and the methods of infection.	S2	Lectures Individual and group discussion	Quizzes, Midterm and final exams Electronic exam
2.2	Examine the microscopic slides for parasites	S4	Practical Sessions	Practical Exam Lab report

Code	Course Learning Outcomes	Code of PLOs aligned with the program	Teaching Strategies	Assessment Methods
3.0	Values, autonomy, and responsibility			
3.1	Prepare research and presentation on the types of pathogenic parasites and methods of their diagnosis.	V1	Lectures Individual and group discussion	Assignments, Homework, report

C. Course Content

No	List of Topics	Contact Hours
1.	Introduction to Parasitology	4
2.	Protozoology - Amoebiasis	2
3.	Pathogenic Flagellates: Luminal Flagellates Haemoflagelates Genital flagellates	8
4.	Protozoology –Malaria	2
5.	Helminthology: important trematodes (Flukes) Blood Flukes Intestinal Flukes	6
6.	Nematodes (Round Worms)	2
7.	Cestodes (Tapeworms)	2
8.	Entomology: - A brief study on arthropods of medicinal and veterinary importance and their effects on humans and domesticated animals. - Vector control measures	4
	List of topics (practical part)	**30**
1.	Introduction to parasitology lab, Class Sarcodina	4
2.	Class Mastigophora (Digestive tract flagellates) Giardia	2
3.	Class Mastigophora (Tissue and blood flagellates) Leishmania &Trypanosoma	4
3.	Class Mastigophora (urinogenital flagellates)	2
	Ciliophora (Balantidium)	2
4.	Class Sporozoa (plasmodium)	2

5.	Class Trematoda (*Schistosoma* sp.)	4
6.	Class Trematoda (*Fasciola* sp.)	4
7.	Class Cestoda	2
8.	Class Nematoda (Intestinal nematodes)	4
Total		**60**

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Quiz's, Assignments, Research work	Once every 2 weeks as applicable	10%
2.	Mid-term Exam 1	5th – 6th weeks	10%
3.	Mid-term Exam 2	11th – 12th weeks	10%
4.	Electronic exam	13th – 14th weeks	10 %
5.	Practical Exam	14th – 15th weeks	20 %
6.	Final Exam	16th – 18th weeks	40 %

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.).

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	▪ Practical Animal Biology is a practical guide authored by Ahmed Hammad Husseini and Shenouda Demian, though its publication year is not widely listed in major databases. ▪ Diagnostic Medical Parasitology is a key textbook authored by Lynne S. Garcia, first published in 2006 by ASM Press. ▪ ASH & Orihel's Atlas of Human Parasitology is an essential atlas authored by Lawrence R. Ash and Thomas C. Orihel, published in 2007 by the American Society of Clinical Pathologists Press. ▪ Foundations of Parasitology is a comprehensive reference written by Larry S. Roberts, John Janovy Jr., and Steve Nadler, published in 2013 by McGraw-Hill. ▪ Parasitology: A Conceptual Approach is a modern textbook by Eric S. Loker and Bruce V. Hofkin, published in 2015 by Garland Science. ▪ Human Parasitology is an essential text authored by Burton J. Bogitsh, Clint E. Carter, and Thomas N. Oeltmann, published in 2019 by Academic Press. ▪ Medical Parasitology: A Self-Instructional Text is a practical guide authored by Ruth Leventhal and Russell F. Cheadle, published in 2021 by F.A. Davis Company.

Supportive References	▪ General Parasitology is a foundational text authored by Thomas Cheng, published in 1993 by Academic Press.
Electronic Materials	https://medstribune.com/paniker-parasitology-pdf/ https://www.researchgate.net/publication/351103643_Essentials_of_Medical_Parasitology_PDFDrive https://notesmed.com/panikers-parasitology-pdf-free-direct-link-download-notesmed/ https://www.google.com/search?rlz=1C1SQJL_arSA966SA966&sxsrf=AOaemvL5fIwFbJPj-VPYOayJdbOQB9VRAA:1642538687502&q=Human+parasitology+PDF&sa=X&ved=2ahUKEwj19P23lbz1AhW4A2MBHZrFDF8Q1QJ6BAgnEAE&biw=780&bih=357&dpr=1.75 http://en.wikipedia.org/wiki parasitology Encycopedia(parasitology)
Other Learning Materials	Computer- Electronic references and websites Microsoft office ,Word- Power point, Vidos

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	The classroom and laboratories are available with fully equipped instruments and microscopes.
Technology equipment (projector, smart board, software)	The classrooms and laboratories are provided with smart board and e-podium.
Other equipment (depending on the nature of the specialty)	The classrooms and laboratories are provided with smart board and e-podium.

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	Students	Indirect assessment
Effectiveness of Students assessment	Program leader	Direct assessment
Quality of learning resources	Students	Indirect assessment
The extent to which CLOs have been achieved	Faculty	Direct assessment
Other		

Assessors (Students, Faculty, Program Leaders, Peer Reviewers, Others (specify)
Assessment Methods (Direct, Indirect)

G. Specification Approval

COUNCIL /COMMITTEE	BIOLOGY DEPARTMENT COUNCIL
REFERENCE NO.	**7**
DATE	**4/4/1446 [07/10/2024]**