هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

2023
TP-153

Course Specification
(Bachelor)

Course Title:	*Parasitology*
Course Code:	*BIO1308*
Program:	*Bachelor of Science in Biology*
Department:	*Department of Biology*
College:	*Faculty of Science*
Institution:	*University of Tabuk*
Version:	***Course Specification Version Number***
Last Revision Date:	*September 2023*

Table of Contents

A. General information about the course:

1. Course Identification

1. Credit hours:					
3 Credit (2 theoretical + 1 practical) hours.					
2. Course type					
A.	☐University	☐ College	☒ Department	☐Track	☐Others
B.	☒ Required		☐Elective		
3. Level/year at which this course is offered: (6th Level / 3rd year)					
4. Course general Description:					
The course includes an introduction to Parasitology, their taxonomic position and importance, types of parasites and hosts, source way of infection, host-parasite relationship, examples of some parasites infecting humans and animals; their taxonomy, biology, diagnosis and control.					
5. Pre-requirements for this course (if any)**:**					
Invertebrates (BIO1204).					
6. Co-requirements for this course (if any)**:**					
None					
7. Course Main Objective(s):					
By the end of this course, the students will be able to: - Know the general taxonomy of the parasites. - Define the parasitism, hosts, types of parasites, types of hosts. - Know the sources of infections and portals of entry. - Identify the diagnostic methods of different parasites. - Know the taxonomy, habitat, morphology, life cycle, pathogenicity, diagnosis and control of some of Protozoan parasites of medical importance. - Know the Taxonomy, habitat, morphology, life cycle, pathogenicity, diagnosis and control of: Trematodes of medical importance, Cestodes of medical importance and Nematodes of medical importance.					

2. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	2	50%
2	E-learning		

No	Mode of Instruction	Contact Hours	Percentage
3	Hybrid • Traditional classroom • E-learning		
4	Distance learning		
5	**Others (Lab work)**	2	50%

3. Contact Hours (based on the academic semester)

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

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

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	**Knowledge and understanding**			
1.1	Describe the basics of parasitology.	K1	-Lectures. -Class discussion. -Group discussion. -Case studies.	-Quizzes -Midterm examination. -Final examination. -Class discussion and participation. - Homework (Problem-solving).

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
1.2	Describe life cycles of well-known parasites, and pathology caused by these parasites.	K2	-Lectures. -Class discussion. -Group discussion. -Homework assignments. -Case studies.	-Quizzes -Midterm examination. -Final examination. -Class discussion and participation. -Homework assignments.
2.0	**Skills**			
2.1	Summarize morphological features of common parasites.	S1	-Lectures. - Laboratory work. -Class discussion. -Group discussion. -Brainstorming.	-Quizzes -reports -Final examination. -Class discussion and participation. - Homework (Problem-solving).
2.2	Evaluate the complexity of the parasite/host relationship (parasite evasion mechanisms vs host defensive mechanisms).	S5	-Lectures. -Class discussion. -Group discussion. -Brainstorming. -Laboratory work.	-Quizzes -reports -Final examination. -Class discussion and participation. - Homework (Problem-solving).

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
3.0	**Values, autonomy, and responsibility**			
3.1	Work in a team and independently to conduct a specific project.	V1	-Class discussion. -Group discussion.	-Class discussion and participation. -Homework (Problem-solving).
3.2	Show the responsibility to solve given assignments on their own and submit them on time.	V2	-Homework assignment. -Group Project.	-Homework (Problem-solving).

C. Course Content

No	List of Topics	Contact Hours
1.	Course Introduction	2
2.	Introduction to Parasitology, General taxonomy of parasites of medica importance, Types of parasites and types of hosts.	2
3.	Sources of infection and Portals of entry.	2
4.	Host-parasite relationships	2
5.	Protozoa: Taxonomy, Habitat, Morphology, Life cycle, Pathogenicity.	2
6.	Diagnosis and Control of the following protozoa: The Amoebae: (*Entamoeba histolytica*).	2
7.	The blood flagellates: (*Leishmania* spp.)	2
8.	The Ciliates: (*Balantidium coli*).	2
9.	The Sporozoa: Malaria parasites (*Plasmodium* spp.).	2
10.	Helminthes: Taxonomy, Habitat, Morphology, Life cycle, Pathogenicity,	2
11.	Diagnosis and Control of Trematodes, Cestodes and Nematodes of medica importance such as: Cestodes: Intestinal Cestodes:, *Taenia saginata*, *Taenia solium*	2
12.	Trematodes: Blood flukes: *Schistosoma haematobium*, *Schistosoma mansoni* & *Schistosoma japonicum*.	2
13.	Nematodes: Intestinal nematodes: *Ascaris lumbricoides*.	2
14.	Nematodes: Hookworms: *Ancylostoma duodenale*.	2
15.	Insecta (Medical entomology).	2
	Total	30

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Class Participation	During whole teaching period	5
2.	Homework (Problem-solving)	3 to 13	5
3.	Short Exams (Quizzes)	During whole teaching period	5
4.	Midterm Theoretical Examination	8-9	20
4.	Reports (For Practical)	During whole teaching period	10
5.	Final Practical Examination	15	15
6.	Final Theoretical Examination	17	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	- Stephen Miller and Todd A. Tupper (2023): Zoology, 12th Edition. McGraw Hill. - Campbell, N. A., Reece, J. B., Taylor, M R., Simon, E. J., Dickey, J L., & Cummings, B. (2010). Biology: Concepts &Connections with MasteringBiology.
Supportive References	Textbook of Zoology, 6th Edition.
Electronic Materials	- Websites on the internet that are relevant to the topics of the course. - www.sciencedirect.com - www.plantphysiol.org.
Other Learning Materials	NA

2. Required Facilities and equipment

Items	Resources

Accommodation ,Classrooms, laboratories, demonstration rooms/labs, etc	- A sufficient number of classrooms to accommodate students - Well-equipped practical laboratories to accommodate students
Technology Resources (AV, data show, Smart Board, software, etc.)	- Data show - Wireless connection in the building for students and faculties.
Other Resources Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list	- Well-equipped lab, samples slides, microscope

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	- Students. - Faculty members.	Indirect & direct: - Questionnaires. - Meetings.
Effectiveness of Students assessment	- Quality and development committee. - Department chair.	- Course report. - Program annual report.
Quality of learning resources	- Plan and program committee. - Students. - Staff members.	Indirect & direct: - Questionnaires. - Meetings. - Reports.
The extent to which CLOs have been achieved	- Quality and development committee. - Peer Reviewer. - Program leaders.	Indirect & direct: - Questionnaires. - Meetings. - Reports.
Other		

Assessors (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)

Assessment Methods (Direct, Indirect)

G. Specification Approval

COUNCIL /COMMITTEE	PROGRAMS AND STUDY PLANS COMMITTEE
REFERENCE NO.	
DATE	SEPTEMBER 2023