هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

اعتماد NCAAA T4 2020

Course Specifications

Course Title:	**Parasitology**
Course Code:	**BIO451**
Program:	**Bachelor of Science in Biology**
Department:	**Department of Biology**
College:	**Faculty of Science**
Institution:	**University of Tabuk**

Table of Contents

A. Course Identification

1. Credit hours:	**3 (2 Theoretical + 1 Practical) hours**
2. Course type	
a.	University ☐ College ☐ Department ☑ Others ☐
b.	Required ☑ Elective ☐
3. Level/year at which this course is offered:	**Level 6/ Second semester /Third year**
4. Pre-requisites for this course (if any)**:**	**General Zoology (BIO251)**
5. Co-requisites for this course (if any)**:**	**None**

6. Mode of Instruction (mark all that apply)

T	Mode of Instruction	Contact Hours	Percentage
1	**Traditional classroom**	2	50%
2	**Blended**		
3	**E-learning**		
4	**Distance learning**		
5	**Other laboratory**	2	50%

7. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	**Lecture**	26
2	**Laboratory/Studio**	26
3	**Tutorial**	
4	**Others** (specify)	
	Total	**52**

B. Course Objectives and Learning Outcomes

1. Course 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 human and animals; their taxonomy, biology, diagnosis and control.

2. Course Main Objective

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: 1. Trematodes of medical importance 2. Cestodes of medical importance 3. Nematodes of medical importance.

3. Course Learning Outcomes

CLOs		Aligned PLOs
1	**Knowledge and Understanding**	
1.1	To describe the basics of parasitology.	K1
1.2	To describe life cycles of well-known parasites, and pathology caused by these parasites.	K1
2	**Skills :**	
2.1	To summarize morphological features of common parasites.	S1
2.2	To collect data from of internet and computer programs.	S4
3	**Values:**	
3.1	To work independently and as part of group.	V1
3.2	To show the responsibility to solve given assignments on their own and submit them on time.	V1

C. Course Content

No	(List of Topics (Theory parts	Contact Hours
1	Introduction to Parasitology	2
2	General taxonomy of parasites of medical importance	2
3	Types of parasites and types of hosts	2
4	Sources of infection and portals of entry	2
5	Host-parasite relationships	2
6	Protozoa : Taxonomy, Habitat, Morphology, Life cycle, Pathogenicity, Diagnosis and Control of the following protozoa: The Amoebae: (*Entamoeba histolytica*).	2
7	The blood flagellates: (*Leishmania* spp.) The Ciliates: (*Balantidium coli*).	2
	Mid Term Exam	
8	The Sporozoa: Plasmodium spp. (Malaria parasites).	2
9	Helminthes: Taxonomy, Habitat, Morphology, Life cycle, Pathogenicity, Diagnosis and Control of Trematodes, Cestodes and Nematodes of medical importance such as: Cestodes: Intestinal Cestodes:, *Taeniasaginata, Taenia solium*	2
10	Trematodes: Blood flukes: *Schistosoma haematobium, Schistosoma mansoni* & *Schistosoma japonicum.*	2
11	Nematodes: Intestinal nematodes: *Ascaris lumbricoides*.	2
12	Nematodes: Hookworms: *Ancylostoma duodenale*	2
13	Insecta (Medical entomology)	2
	Final Exam	
Total		**26**

.No	(List of Topics (Laboratory parts	Contact Hours
1	Protozoa: *Entamoeba histolytica*.	2
2	*Leishmania* spp	2
3	Plasmodium	2
4	Trichomonas vaginalis	2
5	*Balantidium coli*	2
6	*Schistosoma haematobium*	2
7	*Schistosoma mansoni* & *Schistosoma japonicum*	2
	Midterm Exam	
8	*Taenia saginata* & *Taenia solium*	2
9	*Ascaris lumbricoides*	2
10	*Ancylostoma duodenale*	2
11	Scabies & Ticks	2
12	Bed bug & Lice	2
13	Mosquito	2
	Final Practical Exam	
Total		**26**

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	**Knowledge and Understanding**		
1.1	To describe the basics of parasitology.	- Lectures. - Activates and homework.	- Short quizzes. - Final exams. - Homework.
1.2	To describe life cycles of well-known parasites, and pathology caused by these parasite	- Lectures. - Activates and homework.	- Short qQuizzes. - Final exams. - Homework.
2.0	**Skills**		
2.1	To summarize morphological features of common parasites.	- Lab demonstrations. - Lectures. - Individual and small group tasks.	- Assessment of lab reports. - Practical examinations.
2.2	To collect data from of internet and computer programs	- Lab demonstrations. - Lectures. - Individual and small group tasks.	- Individual and group presentations.
3.0	**Values**		
3.1	To work independently and as part of group	- Essay writing. - Individual presentation or group	- Oral and written scientific report. - Interactive discussion

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
3.2	To show the responsibility to solve given assignments on their own and submit them on time.		

2. Assessment Tasks for Students

#	*Assessment task	Week Due	Percentage of Total Assessment Score
1	Activities	1-13	10%
2	Midterm Theoretical Exam	8	25%
3	Midterm Practical Exam	8	10%
4	Final Practical Exam	14	15%
5	Final Theoretical Exam	15	40%

***Assessment task** (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice:

- Office hours: 6 hours / week at least.
- Academic Guidance for about 30 students as determined by admission and registration.
- Direct supervision of staff for lab works.
- Electronic communication through blackboard and e-mail.

F. Learning Resources and Facilities

1.Learning Resources

Required Textbooks	- Text book of Zoology, Sixth Edition - Biology, (Concepts & Connections) Sixth Edition.
Essential References Materials	- N. A.
Electronic Materials	- AltaVista, Google, yahoo search.
Other Learning Materials	- www.sciencedirect.com

2. Facilities Required

Item	Resources
Accommodation Classrooms, laboratories, demonstration) (.rooms/labs, etc	- A sufficient number of classrooms, well equipped -Practical laboratories are available to accommodate students. -Virtual session provided by the blackboard (which allow discussions, and sharing PowerPoint and video)
Technology Resources AV, data show, Smart Board, software,) (.etc	-Data show -Wireless connection in the building for students and faculties

Item	Resources
Other Resources Specify, e.g. if specific laboratory) equipment is required, list requirements or (attach a list	Well-equipped lab, samples slides, microscope

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Effectiveness of teaching and assessment	- Students	Indirect - Questionnaires.
The extent of achieving the course learning outcomes	- Program committee - Staff members - Students	Direct - Questionnaires. - Reports. - Meetings
Quality of learning resources	- Program leaders - Peer Reviewer	Direct & Indirect - Questionnaires - Reports - Meetings

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)
Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

H. Specification Approval Data

Council / Committee	Biology Department Council
Reference No.	
Date	1/6/2022