



Course Specifications

Course Title:	General Zoology
Course Code:	BIO251
Program:	Bachelor of Science in Biology
Department:	Department of Biology
College:	Faculty of Science
Institution:	University of Tabuk

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A. Course Identification

1. Credit hours: 3 (2 Theoretical + 1 Practical) hours			
2. Course type			
a.	University <input type="checkbox"/>	College <input type="checkbox"/>	Department <input checked="" type="checkbox"/> Others <input type="checkbox"/>
b.	Required <input checked="" type="checkbox"/>	Elective <input type="checkbox"/>	
3. Level/year at which this course is offered: Level 4/ Second semester/ Second year			
4. Pre-requisites for this course (if any): General Biology 2 (BIO202)			
5. Co-requisites for this course (if any): None			

6. Mode of Instruction (mark all that apply)

No	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 the definition of zoology, the characteristic of the animals, the importance of animal, taxonomy of invertebrates, the different method of feeding, locomotion, excretion and reproduction in general classes of invertebrates.

2. Course Main Objective

By the end of this course, the students should be able to:

- This course provides an introduction to the biology of specific phyla, classes, and orders of Invertebrates with emphasis on classification, morphology, structure and function of their internal anatomy, developmental pathways and fundamental concepts characteristic of this diverse animal groups.

3. Course Learning Outcomes

	CLOs	Aligned PLOs
1	Knowledge and Understanding Upon successful completion of this course, the students will be able to:	
1.1	Define animals systematically in the Animal Kingdom.	K1

CLOs		Aligned PLOs
1.2	Describe the external and internal structures of invertebrate animals.	K2
2	Skills : Upon successful completion of this course, the students will be able to:	
2.1	Draw some examples of invertebrate animals.	S1
2.2	Compare animal development during different stages of their life cycles.	S2
2.3	Contrast taxonomically between different animals.	S3
3	Values: Upon successful completion of this course, the students will be able to:	
3.1	Conduct a work individual or as a member in a team.	V1

C. Course Content

No	(List of Topics (Theory part	Contact Hours
1	Introduction to the concept of Zoology	2
2	General characters, taxonomy and examples of protozoa	2
3	General characters, Internal Structure of protozoa	2
4	Porifera (characters, types, structure)	2
5	Coelenterata (Characters, <i>Hydra</i> , taxonomy)	2
6	Coelenterata (Characters, <i>Hydra</i> , Taxonomy)	2
7	Platyhelminthes (General characters, classification and examples (<i>Fasciola</i> and other examples)	2
	Midterm Exam	
8	Nematoda (<i>Ascaris</i>)	2
9	Annelida (Characters, the earthworm, other examples, classification)	2
10	Arthropoda (General characters, Classification and examples in addition to study an insect as a model).	2
11	Arthropoda (General characters, Classification and examples in addition to study an insect as a Model).	2
12	Mollusca (General features, example, classification)	2
13	Echinodermata (Characters, examples, classification)	2
	Final Exam	
Total		26



Practical Part:

N o	List of Topics	Contact Hours
1	Introduction, Lab Safety and Basic Instruments in Zoology Lab	2
2	Protozoa	2
3	Porifera	2
4	Coelenterate	2
5	Coelenterate	2
6	Platyhelminthes	2
7	Annelida	2
	Midterm Practical Exam	
8	Mollusca	2
9	Mollusca	2
10	Arthropoda	2
11	Arthropoda	2
12	Echinodermata	2
13	Echinodermata	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	Define animals systematically in the Animal Kingdom.	<ul style="list-style-type: none"> - Lectures. - Case studies and articles. - Activities and homework 	<ul style="list-style-type: none"> - Quizzes. - Homework. - Final exam.
1.2	Describe the external and internal structures of invertebrate animals		
2.0	Skills Upon successful completion of this course, the students will be able to:		
2.1	Draw some examples of invertebrate animals.	<ul style="list-style-type: none"> - Lab demonstration, dissection and drawing skills. - Individual presentation and working as a part of group. 	<ul style="list-style-type: none"> - Lab demonstrations, dissection and drawing skills.
2.2	Compare animal development during different stages of their life cycles.		
2.3	Contrast taxonomically between different animals.		
3.0	Values		
3.1	conduct a work individual or as a member in a team	<ul style="list-style-type: none"> - Lab demonstration. 	<ul style="list-style-type: none"> - Interactive discussion and participation.



2. Assessment Tasks for Students

#	*Assessment task	Week Due	Percentage of Total Assessment Score
1	Quizzes + Assignments + Class discussion	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: 8 hours / week.
- Academic Guidance for about 30 students as determined by admission and registration.
- Direct supervision of staff for lab works.
- Electronic communication through university web page and e-mail.

F. Learning Resources and Facilities

1. Learning Resources

Required Textbooks	<ul style="list-style-type: none"> - Pechenik, Jan A. (2010): Biology of the Invertebrates, 6th Edition. McGraw-Hill, New York. USA. ISBN- 13 9780073028262. - Brooker, R. J., Widmaier, E. P., Graham, L. E. and Stiling, P. D. (2008). Biology. McGraw Hill, New York, USA.
Essential References Materials	<ul style="list-style-type: none"> - Pechenik, Jan A. (2010). Biology of the Invertebrates, 6th Edition. McGraw-Hill. ISBN- 139780073028262. - Brooker, R. J., Widmaier, E. P., Graham, L. E. and Stiling, P. D. (2008). Biology. McGraw-Hill, New York. USA.
Electronic Materials	<ul style="list-style-type: none"> - Websites on the internet that are relevant to the topics of the course.
Other Learning Materials	<ul style="list-style-type: none"> - Microsoft office package.

2. Facilities Required

Item	Resources
Accommodation Classrooms, laboratories, demonstration) (.rooms/labs, etc	<ul style="list-style-type: none"> - A sufficient number of classrooms, well equipped -practical laboratories are available to accommodate students. -Virtual session provided by the blackboard (which allow discussions PowerPoint and video sharing)

Item	Resources
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)	Slides of invertebrates and light 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

