Specification for Biology course

2025/2026

1-Basic information

Course title	**Biology (Zoology)**							
Course code	**BIZ.112**							
Department/s participating in delivery of the course	**Biology**							
Number of units/credit hours	**Lecture**	1	**Tutorial**	0	**Practic**	1(2)	**Total**	2(3)
Course Type	√ **Core**		**Elective**					
Academic level at which the	First level							
Semester	Spring semester							
Academic program	Bachelor of Veterinary medicine (BVM)							
Faculty	Veterinary medicine							
University	Benha University							
Name of course coordinator	Prof. Dr. NASR ALLAH HASSAN. Faculty of science, Benha university							
Course Specification Approval	Faculty council 27-8-2025							
Course Specification Approval	Department council 8/7/2025							

2-Course overview

- **Course contents written in the program by law:**

Classification of the Animal Kingdom; General Characteristics of Each Class.

3- Course Learning Outcomes CLOs

	(NARS) outcomes		Course outcomes	
	Code	**Text**	**Code**	**Text**
Knowledge and understanding	2.1	Basic sciences of biology, chemistry, biophysics, genetics, biostatics, computer science and veterinary terminology.	a1	Identify the plant and animal kingdom.
			a2	Identify the basic knowledge about viruses
			a3	Identify the basic

				knowledge about bacteria.
			a4	Describe fungi and Algae.
			a5	Describe gymnosperms and angiosperms.
Intellectual skills	4.2	Assess and criticize, at the fundamental level, how data are derived.	b1	Interpret prokaryotic and eukaryotic plants.
			b2	Interpret benefits of microorganisms, fungi and algae
			b3	Distinguish between microorganisms
Professional and practical skills	3.1	Employ all the gained knowledge and understanding in clinical practice in a skillful pattern.	c1	Examine prokaryote and eukaryote.
			c2	Examine different prokariotic microorganisms.
			c3	Investigate microorganisms.
General and transferable skills	5.1	Work under pressure and / or contradictory conditions.	d1	Work under pressure during biology lab cession
	5.6	Utilize computer and internet skills.	d2	Utilize computer and internet skills, read paper via internet about biology.

4-Teaching and learning methods					
Lectures	√	**Discussion session**	√	**Practical**	√
Field visit		**Research assignment**	√	**Case study**	
Others	1. Interactive demonstration 2. Interview or Role play				

- Course Schedule:

Week [W]	Topics	Semester hours				
		Lecture	tutorial	Laboratory [practical]	Others	Total
W1	Introduction and plant and animal kingdom	1	0	1(2)	0	2(3)
	Introduction and plant and animal kingdom	0	0		0	
W2	Properties and structure of viruses	1	0	1(2)	0	2(3)
	Properties and structure of viruses	0	0		0	
W3	Types and life cycles of viruses	1	0	1(2)	0	2(3)
	Types and life cycles of viruses	0	0		0	
W4	Properties and structure of bacteria	1	0	1(2)	0	2(3)
	Properties and structure of bacteria	0	0		0	
W5	Reproduction of bacteria	1	0	1(2)	0	2(3)
	Reproduction of bacteria	0	0		0	
W6	Properties and structure of cyanophyta	1	0	1(2)	0	2(3)
	Properties and structure of cyanophyta	0	0		0	
W7	Semester work (one hour exam)	----------				
W8	Properties and structure of fungi	1	0	1(2)	0	2(3)
	Properties and structure of fungi	0	0		0	
W9	Reproduction of some fungal species	1	0	1(2)	0	2(3)
	Reproduction of some fungal species	0	0		0	
W10	Characters of archegoniate 1	1	0	1(2)	0	2(3)
	Characters of archegoniate 1	0	0		0	
W11	Characters of archegoniate 2	1	0	1(2)	0	2(3)
	Characters of archegoniate 2	0	0		0	
W12	Reproduction of archegoniata1	1	0	1(2)	0	2(3)
	Reproduction of archegoniate 1	0	0		0	
W13	Reproduction of archegoniate 2	1	0	1(2)	0	2(3)
	Reproduction of archegoniate 2	0	0		0	
W 14	Reproduction of archegoniate 3	1	0	1(2)	0	2(3)

	Revision	**0**	**0**		**0**	
W15	Practical exam	----------				
Total hours						**15**

5- Methods of students' assessment

a- Assessment methods (summative and formative)

1. **Formative assessment**: including (weekly quizzes, homework assignments and surveys).
2. **Summative assessment** including (quizzes, class activities, semester work, practical exam, oral exams and final written exams).

b- Assessment schedule and weight

Assessment method	Assessment Timing (Week Number)	Marks/ Scores	Percent Percentage of total course Marks
Semester work including one hour exam	7th week	10	10%
Practical exam	15th week	30	30%
Formative assessment	Through semester	----------	---------
oral exam	End of semester	10	10%
Written exam	End of semester	50	50%
Assignments / Project /Portfolio/ Logbook	--------	-------	-------
Field training	--------	----------	-------
Other (Mention)	-------	--------	-------
Total		100	100%

6- Learning resources and supportive facilities:

Learning resources	**Main reference**	Department authorized book Handout to student part by part Notes approved by department of biology
	Essential books (text	- Bharati Bhattacharya (2005) Systematic Botany. - Bharati Bhattacharya (2005) Systematic Botany

	books)	
	Periodicals, Web sites, . . . etc	• Canadian Journal of botany. • www.scincedirect.com. • www.ekb.eg
	Learning platform	Thinqi
supportive facilities	**Devices & instruments**	• Microscope • White board • Data show • Laboratory • Slide and paper projector

Matrices:

A- Content and ILOs matrix:

b- Content-ILOs matrix	
Course topics	**Course ILOs**

	Knowledge and understanding	Intellectual skills	Professional and practical skills	General and transferable skills
Introduction and plant and animal kingdom	a1	b1	c1	d1
Properties and structure of viruses	a2	b2,b3	c1,c2,c3	d1,d2
Types and life cycles of viruses	a2	b2,b3	c2,c3	d1,d2
Properties and structure of bacteria	a3	b2,b3	c2,c3	d1,d2
Reproduction of bacteria	a3	b2,b3	c2,c3	d1,d2
Properties and structure of cyanophyta	a4	b1,b2	c1,c2	d1,d2
Properties and structure of fungi	a4	b1,b2	c1,c2	d1,d2
Reproduction of some fungal species	a4	b1,b2	c1,c2	d1,d2
Properties and structure of algae	a4	b1,b2	c1,c2	d1,d2
Reproduction of some algal species	a4	b1,b2	c1,c2	d1,d2
Characters of archegoniata	a5	b1,b2	c1,c2	d1,d2
Reproduction of archegoniata	a5	b1,b2	c1,c2	d1,d2
Introduction and plant and animal kingdom	a1	b1	c1	d1,d2
Properties and structure of viruses	a2	b2,b3	c1,c2,c3	d1,d2
Types and life cycles of viruses	a2	b2,b3	c2,c3	d1,d2
Properties and structure of bacteria	a3	b2,b3	c2,c3	d1,d2
Reproduction of bacteria	a3	b2,b3	c2,c3	d1,d2
Properties and structure of	a4	b1,b2	c1,c2	d1,d2

cyanophyta				
Properties and structure of fungi	a4	b1,b2	c1,c2	d1,d2
Reproduction of some fungal species	a4	b1,b2	c1,c2	d1,d2
Properties and structure of algae	a4	b1,b2	c1,c2	d1,d2
Reproduction of some algal species	a4	b1,b2	c1,c2	d1,d2
Characters of archegoniata	a5	b1,b2	c1,c2	d1,d2
Reproduction of archegoniata	a5	b1,b2	c1,c2	d1,d2
Introduction and plant and animal kingdom	a1	b1	c1	d1

B- Teaching and learning methods and ILOs matrix:

- Teaching and learning methods -ILOs matrix

ILOs		Teaching and Learning methods						
		L	P&M	D&S	P	Ps	Bs	R&R
Skills	a1	√	√	√	√	√	0	√
	a2	√	√	√	√	√	0	√
	a3	√	√	√	√	√	0	√
	a4	√	√	√	√	√	0	√
	a5	√	√	√	√	√	0	√
Skills	b1	√	√	√	√	√	√	0
	b2	√	√	√	√	√	√	√
	b3	√	√	√	0	0	0	√
Skills	c1	√	√	0	√	√	√	0
	c2	√	√	0	√	√	√	0

	c3	√	√	0	√	√	√	0
Skills	d1	√	√	√	√	√	√	√
	d2	0	0	0	√	√	√	√

L**: Lecture,** P&M**: Presentations & Movies,** D&S: **Discussions & Seminars P: Practical** Ps: **Problem solving,** Bs: **Brain storming**

C- Assessment methods and ILOs matrix:

Assessment methods -ILOs matrix							
ILOs		**Assessment methods**					
		Formative assessment	**Semester work (1 hr exam)**	**Oral Exam**	**Practical Exam**	**Student activity**	**Semester Work**
Knowledge and understanding	a1	√	√	√			
	a2	√	√	√			
	a3	√	√	√			
	a4	√	√	√			
	a5	√	√	√			
Intellectual skills	b1	√	√	√		√	√
	b2	√	√	√		√	√
	b3	√	√	√		√	√
Professional and practical skills	c1				√	√	
	c2				√	√	
	c3				√	√	
General and transferable skills	d1	√				√	
	d2	√				√	

-Course coordinator:

Prof. Dr. NASR ALLAH HASSAN.

-Program coordinator: Prof. Dr. Mahmoud Abouelroos

Faculty of Veterinary Medicine, Benha University
Website: http://www.fvtm.bu.edu.eg **فـاكس: 0132463074**
E-mail: info@fvtm.bu.edu.eg