



MAHATMA GANDHI UNIVERSITY, KERALA

Abstract

Bachelor of Science (Honours) Zoology and Industrial Microbiology (Double Major) - Fourth Semester - Modifications to the Course Outcomes, Course Content and pattern for End Semester Evaluation - Approved - Orders Issued.

ACA 16

No. 327/ACA 16/2026/MGU

Priyadarshini Hills, Dated: 12.01.2026

Read:- 1. U.O.No.5797/AC A16/2024/MGU, dated.27.06.2024.

2. Minutes of the meeting of the Expert Committee on Zoology (UG)
4. Orders of the Vice Chancellor under Section 10 (17), Chapter III of the Mahatma Gandhi University Act 1985, dated 09.01.2026.

ORDER

The syllabi of various Honours Under Graduate Programmes coming under The MGU-UGP (Honours) Regulations, 2024, have been approved vide paper read as (1) above and published on the website of the University.

The Expert Committee on Zoology (UG), deliberated on modifying the **Course Outcomes, Course Content and the pattern for End Semester Evaluation** of the DSC, DSE, SEC and VAC type courses in the **Fourth Semester syllabus of Bachelor of Science (Honours) Zoology and Industrial Microbiology (Double Major)** programme and has submitted recommendations, vide paper read as (2) above.

(Recommendations are attached as Annexure).

Considering the urgency of the matter, sanction has been accorded by the Vice Chancellor, in exercise of the powers of the Academic Council vested upon him under Section 10(17), Chapter III of the Mahatma Gandhi University Act 1985, vide paper read as (3) above, to approve the aforementioned recommendations.

Hence, the **Course Outcomes, Course Content and the pattern for End Semester Evaluation of the said courses in the Fourth Semester of Bachelor of Science (Honours) Zoology and Industrial Microbiology (Double Major)** programme stands modified to this extent.

Orders are issued accordingly.

SUDHA MENON J

ASSISTANT REGISTRAR III
(ACADEMIC)
For REGISTRAR

Copy To

1. PS to VC
2. PA to Registrar/CE
3. Convenor, Expert Committee, Zoology (UG)
4. JR 2 (Admin)/DR 2, AR 3 (Academic)
5. JR/DR/AR (Exam)
6. Tabulation/Academic Sections concerned
7. AC C1/AC C2 Sections
8. IT Cell 3/OQPM1Sections
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10. Stock File/File Copy

File No. 86410/AC A16-1/2025/AC A16

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Section Officer

ANNEXURE

SEMESTER IV

Course Name : Animal Diversity - Chordata- I

Course Code : MG4DSCZIM200

Course Outcomes

CO.No	Expected Course Outcome (Modified)	Learning Domains (Modified)	PO.No.	Page No.
1	Describe general characters and classification of Chordata up to Class Reptilia	U		
2	Explain different organ systems of frog	U		
3	Discuss the general topics in Superclass Pisces and Class Reptilia	U,A	No Change	73
4	Demonstrate expertise in the laboratory in mounting scales & and other practicals.	U,A		
5	Removed			

Course Content

Content for Classroom transaction (Units)

Module	Units	Course Description	Hours	CO.No (Modified)	Page No.
1	1.1	No change	No change	1	74,75,76
	1.2				
	1.3				
	1.4				
	1.5				

2	2.1	No Change	No Change	1	
	2.2				
	2.3				
3	3.1			1	
	3.2			2	
	3.3			1	
	3.4			3	
	3.5			4	
4	Practicals				

Mode of Assessment

Assessment Type	B. End Semester Examination (Modified)			Page No.
	Type of Questions	No. of Questions to be Answered	Total Marks	
Theory	Short Essays	4 out of 6	$4 \times 5 = 20$	76
	Short Answer Questions	6 out of 8	$6 \times 3 = 18$	
	Multiple Choice Questions	12 out of 12	$12 \times 1 = 12$	
Practical				
Total Marks = 35			Duration - 2 hrs	
Dissection – 10 marks (Identify- 1, sketch- 5 and label (any eight parts) – 4 marks)				
OR				
Identification of Labelled parts (any five) and mention its function -10 marks				
Mounting -5 marks				
Scientific drawing/section – 5 marks				
Spotter identification/				
Osteology/Taxonomic identification – 5 marks				

Course Name : General Toxicology
Course Code : MG4DSEZIM200

Course Outcomes

CO.No	Expected Course Outcome	Learning Domains (Modified)	PO.No	Page No.
1	No change	U	No change	78
5		U,A		

Course Content

Content for Classroom transaction (Units)

Module	Units	Course Description	Hours	CO.No. (Modified)	Page No.
2	2.3	No Change	No Change	3	79,80
3	3.4			4	
	3.5				

Mode of Assessment

Assessment Type	B. End Semester Examination (Modified)			Page No.
	Theory		Duration- 2 hrs	
	Total Marks = 70			
	Type of Questions	No. of Questions to be Answered	Total Marks	
	Short Essay	6 out of 8	$6 \times 5 = 30$	
	Short Answer Questions	10 out of 12	$10 \times 3 = 30$	
	Multiple Choice Questions	10 out of 10	$10 \times 1 = 10$	
				80

Course Name : Industrial Microbiology and Fermentation Technology

Course Code : MG4DSCZIM201

Course Content

Content for Classroom transaction (Units)

Module	Units (Modified)	Course Description	Hours	CO.No.	Page No.
2	2.1	No Change	No Change	No Change	82
	2.2				
	2.3 (Unit No. added)				

Course Name : Medical Microbiology

Course Code : MG4DSEZIM201

Course Content

Content for Classroom transaction (Units)

Module	Units	Course Description	Hours (Modified)	CO.No.	Page No.
4	4.6	No Change	15	No Change	87

Course Name : Emergency Life Support and First Aid

Course Code : MG4SECZIM200

Course Outcomes

CO.No	Expected Course Outcome	Learning Domains (Modified)	PO.No	Page No.
1	No Change	U,S	No Change	93

Course Content
Content For Classroom Transaction (Units)

Module	Units	Course Description	Hours	CO.No. (Modified)	Page No.
3	3.4		No Change	5	94
		Activity		1,2	

Mode of Assessment

Assessment Type	B. End Semester Examination (Modified)			Page No. 95
	Theory			
	Total Marks = 50		Duration - 1.5 hrs	
	Type of Questions	No. of Questions to be Answered	Total Marks	
	Short Essays	4 out of 6	$4 \times 5 = 20$	
	Short Answer Questions	6 out of 8	$6 \times 3 = 18$	
	Multiple Choice Questions	12 out of 12	$12 \times 1 = 12$	

Course Name : Nutrition and Lifestyle Diseases

Course Code : MG4VACZIM200

Course Outcomes

CO.No	Expected Course Outcome	Learning Domains (Modified)	PO.No (Modified)	Page No.
6	No Change	A	1,2,10	97

Course Content

Content for Classroom transaction (Units)

Module	Units	Course Description	Hours (Modified)	CO.No.	Page No.
3	3.2	No Change	5	No Change	98