



MAHATMA GANDHI UNIVERSITY, KERALA

Abstract

Bachelor of Science (Honours) Aquaculture - Fifth Semester - Modifications to the Course Details, Course Outcomes and Course Content - Approved - Orders Issued.

ACA 16

No. 5593/ACA 16/2026/MGU

Priyadarsini Hills, Dated: 02.06.2026

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

2. Minutes of the meeting of the Expert Committee on Aquaculture (UG)

4. Orders of the Vice Chancellor under Section 10 (17), Chapter III of the Mahatma Gandhi University Act 1985, dated 31.05.2026.

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 Aquaculture (UG), deliberated on modifying the **Course Details, Course Outcomes and Course Content of the DSC, DSE and SEC** type courses in the **Fifth Semester** syllabus of **Bachelor of Science (Honours) Aquaculture** 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 Details, Course Outcomes and Course Content** of the said courses in the Fifth Semester syllabus of **Bachelor of Science (Honours) Aquaculture** programme stands modified to this extent.

Orders are issued accordingly.

SIJI ANNA KURIEN

ASSISTANT REGISTRAR III
(ACADEMIC)
For REGISTRAR

Copy To

1. PS to VC
2. PA to Registrar/CE
3. Convenor, Expert Committee, Aquaculture (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
9. PRO/IQAC/Records Sections
10. Stock File/File Copy

File No. 25137/AC A16-1/2026/AC A16

Forwarded / By Order

Section Officer

The document is digitally approved. Hence signature is not needed.

ANNEXURE

SEMESTER V

ALL COURSES

Course Level	300-399 (Modified)
--------------	--------------------

Course Name : Seed Production and Hatchery Management of Finfishes

Course Code : MG5DSCAQC300

		Page No.
Pre-requisites (Modified)	Students should possess knowledge regarding the basic biology of finfishes.	126

Course Outcomes

CO.No	Expected Course Outcome (Modified)	Learning Domains	PO.No.	Page No.
1	No Change	No Change		126-127
2	Formulate different criteria for designing a hatchery and the selection of equipment.			
3	No Change			
4				
5				
6				

Course Content

(Content for classroom transaction (units))

Module	Units	Course Description (Modified)	Hours	CO.No. (Modified)	Page No.
1		No Change	No Change	No Change	127-128
2	2.1	No Change	No Change	No Change	
	2.2				
	2.3	Seed production and nursery rearing of air breathing fishes- <i>Anabas testudineus</i> , Murrels -snake head.			
2.4	Seed production and hatchery management of air breathing				

		catfishes- <i>Clarias</i> <i>sps</i> , <i>Heteropneustes</i> <i>sp</i> , <i>Pangasius</i> <i>pangasius</i> <i>sp</i>		
3	3.1	Seed production and hatchery technology of brackishwater fishes – <i>Tilapia</i> , <i>Mugil cephalus</i> , <i>Chanos chanos</i> , <i>Etroplus suratensis</i> , <i>Lates calcarifer</i> .	No Change	No Change
	3.2	Seed production and hatchery technology of marine fishes - Cobia, Grouper, silver pompano.		
4	4.1	No Change	No Change	No Change
	4.2			3
	4.3			No Change
	4.4			
	4.5			
5	Teacher Specific Content			

Course Name : Post Harvest Technology and Quality Control

Course Code : MG5DSCAQC301

Course Outcomes

CO.No	Expected Course Outcome (Modified)	Learning Domains	PO.No.	Page No.
1	Gain knowledge of the various post-harvest processes, including harvesting methods, handling, pre-treatment, storage, transportation and packaging.	No Change		130-131
2	No Change			
3	Familiarize with different freezing technology, changes associated with freezing and other shelf life improvement techniques used in sea food industry.			
4	Identify the importance of thawing, packaging in food processing industry.			
5	No Change			
6				

Course Content
(Content for classroom transaction (units))

Module	Units	Course Description	Hours	CO.No. (Modified)	Page No.
1		No Change	No Change	No Change	132-134
2	2.1	No Change	No Change	No Change	
	2.2				
	2.3				
	2.4				
	2.5			3	
	2.6				
3		No Change	No Change	No Change	
4		No Change	No Change	No Change	
5		Teacher Specific Content			

Course Name: Inland and Marine Capture Fisheries
Course Code: MG5DSEAQC300

Course Content
(Content for classroom transaction (units))

Module	Units	Course Description	Hours	CO.No. (Modified)	Page No.
1		No Change	No Change	No Change	137-138
2		No Change	No Change	No Change	
3	3.1	No Change	No Change	6	
	3.2			5	
4		No Change	No Change	No Change	
5		Teacher Specific Content			

Course Name: Fish Genetics and Biotechnology
Course Code: MG5DSEAQC301

Course Outcomes

CO.No	Expected Course Outcome (Modified)	Learning Domains (Modified)	PO.No.	Page No.
1	No Change	No Change	No Change	141-142
2				
3				

4				
5	No Change	No Change	No Change	
6	Understand the role of marine bioresources, focusing on bioactive compounds, marine natural products, metabolites and marine toxins. Analyze the role of immunological agents in aquaculture health management.	U, An	No Change	

**Course Content
(Content for classroom transaction (units))**

Module	Units	Course Description	Hours	CO.No. (Modified)	Page No.	
1		No Change	No Change	No Change	142-144	
2		No Change	No Change	No Change		
3		No Change	No Change	No Change		
4	4.1	No Change	No Change	No Change		
	4.2					
	4.3			3		
	4.4			5,6		
	4.5			No Change		
5		Teacher Specific Content				

**Course Name : Aquaculture Ecosystem Management and Climate Change
Course Code : MG5DSEAQC303**

**Course Content
(Content for classroom transaction (units))**

Module	Units	Course Description	Hours	CO.No. (Modified)	Page No.
1		No Change	No Change	No Change	152-153
2	2.1	No Change	No Change	2	
	2.2				
	2.3			No Change	
	2.4				
3		No Change	No Change	No Change	
4		No Change	No Change	No Change	
5		Teacher Specific Content			

Course Name : Cold Water Aquaculture, Recreational Fisheries and Integrated Multitrophic Aquaculture

Course Code : MG5DSEAQC304

Course Content

(Content for classroom transaction (units))

Module	Units	Course Description	Hours	CO.No. (Modified)	Page No.
1	1.1	No Change	No Change	No Change	156-158
	1.2			3	
	1.3			No Change	
	1.4			No Change	
2	2.1	No Change	No Change	No Change	156-158
	2.2	Culture of Mahseer (<i>Tor putitora</i> , <i>Tor tor</i> , <i>Tor khudree</i> , <i>Neolissochilus hexagonolepis</i>) and Common carp (<i>Cyprinus carpio</i> var. <i>Cummuinis</i> , <i>Cyprinus carpiospecularis</i> , <i>Carrassius carassius</i>) species from India. Activity: Identification of larval stages of trout and mahseer; Preparation of hatchery layout for cold-water fishes.	No Change	No Change	
	2.3	No Change	No Change	No Change	
	2.4	Special factors for consideration in cold water fish seed production and nursery rearing. Issues and Desired Interventions: Potential and Innovative Strategies for the Development of Coldwater Aquaculture in India-problems encountered in fisheries development of rivers supporting cold water fisheries.	No Change	4,1	
3		No Change	No Change	No Change	
4		No Change	No Change	No Change	
5		Teacher Specific Content			

Course Name : Fabrication and Setting of Marine and Freshwater Aquarium

Course Code : MG5SECAQC300

Course Outcomes

CO.No	Expected Course Outcome (Modified)	Learning Domains (Modified)	PO.No.	Page No.
1	Illustrate the design and construction of home and public aquaria. Examine the present status of aquarium trade in India and globally.	No Change	No Change	160-161
2	No Change	No Change		
3		Ap		
4				
5				

Course Content

(Content for classroom transaction (units))

Module	Units	Course Description	Hours	CO.No. (Modified)	Page No.
1		No Change	No Change	No Change	161-162
2	2.1	No Change	No Change	2,4	
	2.2				
	2.3				
	2.4				
	2.5				
3		No Change	No Change	No Change	
4		Teacher Specific Content			