



KANNUR UNIVERSITY
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(Abstract)

FYUG Microbiology Programme - Typographical error in the Fourth Semester Syllabus - Rectified and implemented w.e.f 2024 Admission - Orders Issued

ACADEMIC C SECTION

ACAD C/ACAD C3/21878/2024

Dated: 18.06.2026

- Read:-1. U.O No. ACAD C/ACAD C3/21878/2024 dated 25/10/2024
2. U.O No. ACAD C/ACAD C3/21878/2024 dated 30/12/2024
3. U.O No. ACAD C/ACAD C3/21878/2024 dated 14/10/2025
4. E-mail of the Chairperson, Board of Studies in Microbiology (Cd) dated 25.05.2026
5. Order of the Hon'ble Vice Chancellor in the file of even no. dated 09.06.2026

ORDER

- 1.The Scheme and Syllabus of First to Fourth Semesters of the B.Sc. Microbiology Programme in tune with KU-FYUGP Regulations 2024 were approved and implemented with effect from 2024 Admission as per the paper read as (1) above.
2. The Modified Scheme (All semesters) & Syllabus (four semesters) of the FYUG Microbiology Programme were approved & implemented w. e. f. 2024 Admission vide paper read as (2) above.
- 3.The Modified Scheme & Syllabus of the Third semester FYUG Microbiology Programme were approved & implemented w. e. f. 2024 Admission vide paper read as (3) above.
- 4.The former Chairperson, Board of Studies in Microbiology (Cd) vide paper read as (4) above, submitted the typographical error rectified syllabus of the Fourth semester FYUG Microbiology Programme for approval .
- 5.The Vice Chancellor after considering the matter in detail has approved the typographical error correction made in the approved Syllabus and permitted to upload the rectified Syllabus on the University Website.
6. Orders are issued accordingly.
7. The rectified syllabus is attached to this U.O and uploaded on the University Website.

Sd/-

Jisha K P

Assistant Registrar II

For REGISTRAR




- To:
1. The Principals of Affiliated colleges
 2. The Controller of Examinations (Through P A)
 3. Former Chairperson, Board of Studies in Microbiology (Cd)

- Copy To:
1. PA to CE (to circulate the same among the sections concerned under Examination Branch)
 2. PS to VC/PA to R
 2. PS to VC/PA to R
 3. JR II (Exam)
 4. DR/AR (Academic)
 5. Web manager (to uploading on the website)
 6. Computer Programmer
 7. SF/DF/FC



Forwarded / By Order


SECTION OFFICER



KU4SECMBG201- MUSHROOM CULTIVATION

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
IV	SEC1	200-299	KU4SECMBG201	3	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
2	2	0	15L+10P	35L+15P	75	1.5

Course Description:

Mushroom cultivation course enables the students to identify edible and poisonous mushrooms and also to understand the nutritive and medicinal values of mushrooms. The course provides the students to get complete understanding of the procedures in spawn production, cultivation methods. The course also provides the students to get enough knowledge in managing various diseases of mushroom and also to get an idea about the post-harvest processing. After completing this course, the students will understand various value-added products from mushroom. After successful completion of this course the students can start self-earning small-scale business in mushroom production.

Course Prerequisite: Nil

Course Outcomes:

CO No.	Expected Outcome	Learning Domains
1	Understand different types of mushrooms and its nutritional values	U/A
2	Understand spawn production and management	U
3	Gain knowledge in mushroom cultivation methods	A
4	Understand the management of diseases of mushrooms and its processing techniques	U/A

**Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C)*



Mapping of Course Outcomes to PSOs

	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8
CO 1	✓	✓		✓				
CO 2		✓			✓			✓
CO 3		✓	✓					
CO 4		✓	✓			✓		✓

COURSE CONTENTS

Contents for Classroom Transaction:

MODULE	UNIT	DESCRIPTION	HOURS
1	Types of mushrooms and health benefits		5
	1	Introduction to mushroom cultivation. History and scope of mushroom cultivation.	
	2	Edible and poisonous mushrooms, common Indian mushrooms,	
	3	Nutritional and medicinal value of mushrooms.	
	4	Morphology and structure of Agaricus.	
2	Spawn production and management		10
	1	Pure culture preparation of mushroom, Media used, Maintenance of culture	
	2	Mushroom spawn and its types.	
	3	Substrates used for spawn production. Mother spawn production, Multiplication of bed spawn from mother spawn. Sterilization of substrate	
	4	Ideal characteristics of good spawn, spawn preservation methods. Factors influencing mushroom growth. Post harvest handling of mushrooms	
3	Management of diseases and processing of mushrooms		10
	1	Identification and management of different pests and diseases of mushrooms. Bacterial diseases – Bacterial blotch, Bacterial rot and Brown spot.	
	2	Fungal diseases – wet bubble, dry bubble, green molds and cobweb disease.	



	3	Insect pests – Phorid flies, Sciarid flies, Beetle. Damage by nematodes.	
	4	Post harvest processing and value-added products from mushrooms	
	Mushroom cultivation methods (Practicals)		30
4	1	Mushroom cultivation – oyster mushroom, paddy straw mushroom and white button mushroom (any one).	
	2	Preparation of substrate. Construction of Mushroom houses, Sterilization of substrate and other materials	
	3	Spawn preparation	
	4	Method of cultivation and harvesting.	
	Teacher Specific Module		5
5	<i>Directions</i>		
	Activity		

Essential Readings:

1. Nita Bhal. (2000). Handbook on Mushrooms. 2nd ed. Vol. I and II. Oxford and IBH Publishing Co. Pvt. Ltd., New Delhi
2. Pandey R.K, S. K Ghosh, 1996. A Hand Book on Mushroom Cultivation. Emkey Publications.
3. Pathak, V. N. and Yadav, N. (1998). Mushroom Production and Processing Technology. Agrobios, Jodhpur.
4. Tewari Pankaj Kapoor, S. C. (1988). Mushroom Cultivation. Mittal Publication, New Delhi.

Suggested Readings:

1. Tripathi, D.P. (2005) Mushroom Cultivation, Oxford & IBH Publishing Co. PVT.LTD, New Delhi.
2. V.N. Pathak, Nagendra Yadav and Maneesha Gaur, Mushroom Production and Processing Technology/ Vedams Ebooks Pvt Ltd., New Delhi (2000)



Assessment Rubrics:

Theory

Evaluation Type		Marks
End Semester Evaluation		35
Continuous Evaluation		15
a)	Test Paper- 1	5
b)	Test Paper-2	5
c)	Assignment	5
d)	Seminar	5
e)	Book/ Article Review	-
f)	Viva-Voce	5
g)	Field Report	-
Total		50

Any components from the above table can be taken for CE not exceeding 15 Marks

Practicals

Evaluation Type		Marks
End Semester Evaluation P		15
Continuous Evaluation P		10
	Test Paper- 1	-
	Test Paper-2	-
	Record	5
	Lab skill	10
	Regularity	5
	Viva-Voce	5
	Report writing	5
Total		25

Any components from the above table can be taken for CE not exceeding 10 Marks

