

Title of Skill Course: Food Safety analyst

1. Department: Department of Microbiology
2. Title: Food Safety analyst
3. Sector:- Food
4. Year of implementation: 2022

Course Structure

Skill Level	Theory Hours	Practical Hours	Total Hours	Credits	No. of students in batch
6	20	25	45	03	30

Syllabus**Course Objectives:****Students should able**

1. To acquire the skill regarding the microbial quality control of food industry.
2. To examine the food samples for detection and confirmation of pathogenic microorganisms.
3. To provide job oriented training to students.

Theory Syllabus (20 Hrs)

Credits (Total Credits 1)	Food Safety analyst	No. of hours per unit/credits
Unit I	Microbial Analysis of food	(10)
	A. Food spoilage : Fermentation, Rope production by spores B. Food spoilage by pathogen o <i>Vibrio</i> o <i>Salmonella</i> o <i>Staphylococcus</i> o <i>Bacillus cereus</i>	
Unit II	Food Safety	(10)
	A. The importance of food safety B. Food laws and regulations C. Hazard analysis critical control point (HACCP) -Food safety management procedures D. Principles of food safety and quality (Good Hygienic Practices, Good Manufacturing Practices)	

Reference Books:

1. K. Vijaya Ramesh , *Food Microbiology*(MJP Publishers, Chennai , 2007)
2. Swaminathan M (1974) *Essentials of Food and Nutrition* (2nd Edition) Ganesh and Co.
3. Frazier W, Westoff D. (2013) *Food Microbiology* (5th Edition) Tata McGraw Hill Education

Practical Syllabus (30 Hrs)

Credits (Total Credits 1)	Food Safety analyst	Contact Hours (25)
	1. DMC (direct microscopic count) of Sauces, Tomato Puree and Pastes	
	2. MPN of food sample	
	3. Bacteriological Examination of food for <i>Salmonella</i>	
	4. Bacteriological Examination of food <i>Vibrio</i>	
	5. Bacteriological Examination of food for <i>Bacillus</i> <i>cereus</i>	
	6. Bacteriological Examination of food for	

Project/ Field Visits/ Industrial Visit-----06 hrs

Course Outcomes:

Students will be able to

1. Learn the detection and determination microorganisms associated with food quality and spoilage.
2. Get skill enhancement regarding the quality control of food industry.
3. Can start their own consultancy regarding food analysis and start Food Safety related Startup

BOS Sub Committee:

Sr. No.	Name of Member	Designation	Address
1	Prof. (Dr.) V. M. Ghorpade	Chairman	YCIS Satara
2	G. V. Utekar	Member	YCIS Satara
3	Mr. A.R. Jadhav	Academic Expert	YCIS Satara
4	Mr. Lokesh Utekar	Industrial Expert	Padmashri Biotech, Satara