Course No.	Course Name	L-T-P - Credits	Year of Introduction
FT234	Food Microbiology Lab - II	0-0-3-1	2016

Prerequisite : FT231 Food microbiology lab - I

Course Objectives

To study evaluation of microbiological quality and identification of microorganism in food.

List of Exercises/Experiments : (Minimum 12 are mandatory)

1. Microbiological assays of growth factors.
2. Evaluation of microbiological quality of potable water
3. Evaluation of microbiological quality of milk
4. Quantitative analysis of milk by Standard plate count (SPC) method.
5. Enumeration of bacteria in milk and presumptive test for coli forms
6. Evaluation of microbiological quality of food products
7. Counting for yeasts and moulds
8. Sample preparation to detect microbial contamination in food samples
9. Methods for identification of *Escherichia coli*
10. Methods for identification of *Staphylococcus aureus*
11. Methods for identification of *Bacillus cereus*
12. Methods for identification of *Vibrio cholerae*
13. Microbial Examination of Fruit sample-surface washing and internal tissue
14. Microbial Examination of vegetable sample-surface washing and internal tissue
15. Demonstration of microbial production of curd
16. Detection of bacteria in spoiled tinned foods
17. Enumeration & Isolation of Staphylococcifrom ready to eat street foods
18. Estimation of microbial count of air.

Expected outcome .

Student will be able to evaluate quality of food and identify microrganisms present.

Text Book:

1. James Cappuccino, *Microbiology: A Laboratory Manual, 10th edition., Natalie Sherman.Pearson Higher education*
2. R C Dubey and D K Maheshwary, *Practical Microbiology,* S. Chand & Co. Ltd., 2006
3. *Prescott's Microbiology w/ Harley Lab Manual 8th Ed. Joanne Wiley. McGraw Hill education*
4. Bibek Ray, *Fundamental Food Microbiology* ,. CRC press