HONOURS CERTIFICATE PROGRAMME PROPOSAL
AY 2022-2023

Department of Microbiology, St. Xavier's College, Mumbai

Activity

	General Information of the Activity	
1.	**Department and Hub**	Dept: Microbiology Hub: Biological science
2.	**Title of the Activity**	**Dinner Date with Microbes** **(**Lecture series with practical demonstrations)
3.	**Name of the Professor taking the course and Email address**	1. Sangeetha Chavan- sangeetha.chavan@xaviers.edu, 2. Aparna Talekar- aparna.talekar@xaviers.edu 3. Kaushik Inamdar- kaushik.inamdar@xaviers.edu
4.	**Name/s of the Resource person/s**	Sangeetha Chavan
5.	**Name of the Dept Coordinator and Email address**	Dr. Pampi Chakraborty pampi.chakraborty@xaviers.edu
6.	**Name of the Hub Coordinator and Email address**	Dr. Priya S priya.s@xaviers.edu
7	**Number of credits for the activity and number of hours**	Credits: 01 Hours: 15
8	**Fees**	1000
9	**Eligibility**	Non-biology students
10	**Number of students**	Minimum quorum required: 10
11	**Duration and Time**	5 weeks with 1.5 hour sessions twice a week in the odd semester (August-September)

	Details of the Activity
1	**Title: Dinner Date with Microbes** (Lecture series with practical demonstrations)
2	**Learning Objectives:** After completing the course students will ● Get familiar with the food microbiology. ● Get knowledge of different microorganisms involved in food preparations. ● Be acquainted with different microbial food products and their preparations. ● Understand the concept of food spoilage and learn different ways of preserving food items. ● Understand food safety and hygiene.
3	**Learning Outcomes:** After completing the course students will be able to ● Identify role of microbes in day-to-day life and in food industry. ● Use microorganisms in different food preparations. ● Recognize the role of microorganisms in food spoilage ● Realize importance of food preservation, food safety and hygiene.
4	**Description** This course seeks to explore the importance of microorganisms in different food preparations, their spoilage and preservation.
5	**Modules** if any: 1. **Let's understand microbes**- Microbiology and significance of microorganisms. Food microbiology and scope. Normal flora of some common foods and important microorganisms in the foods. Practical- Isolation of microorganisms from food items and microscopic observation. 2. **What's the menu?** - Bacterial food products- e.g.- Curd, Yoghurt, Idli, Dhokla, Cheese, Yakult, Kimchi, Chocolate. Use of yeast and fungi in food preparations- Alcohol production (Beer, Wine), Bread, Bread Sourdough. Practical- Curd preparation with starter and Yoghurt with bacteria, leavening of idli batter, Wine production, Bread making with yeast. 3. **When dinner date gets spoiled-** Food Spoilage and food preservation, Food contamination: major challenge of future, Food safety and food hygiene- regulatory aspects. Practical- Isolation of microbes from spoiled food, Isolation of contaminants from street food.