

## ST ALOYSIUS COLLEGE (AUTONOMOUS) MANGALURU, KARNATAKA -575003

https://www.staloysius.edu.in



# DEPARTMENT OF MICROBIOLOGY OFFERS ONLINE CERTIFICATE COURSE

### IN

#### BASIC CONCEPTS IN FOOD MICROBIOLOGY

Preamble:

Course Objective:

Certificate Course in "Food Microbiology" include topics to understand and practice food safety measures at homes, restaurants and hostels.

The course is designed to provide with the background necessary to understand, how microorganisms cause spoilage of food, how pathogens cause disease, how food borne illness is transmitted and how it can be controlled.

This course also provides information about food adulteration and their detection, and including food safety regulations emerging food safety issues. "Food Safety" course is developed with the educational needs of biological science students; however, considering industry demand for university-level graduates trained in sanitation procedures, this course may also be offered to undergraduates in science

with chemistry as optional.

This course will focus on basic microbiology concepts and their application to food safety. At the completion of this course, students will be aware of fundamental microbiological concepts, factors affecting microbial growth, sources of microbes in foods, mechanisms of bacterial transmission and food adulteration and their detection. Students will also learn about food borne illness and important pathogens including viral agents. Students will learn about government food safety agencies, regulation, and policy. Finally, students will be familiar with recent topics associated with food safety including ready-to-eat (RTE) foods, minimally processed foods, and emerging food safety challenges. The goal of the course is to provide students with essential knowledge of the dynamics of pathogenic microorganisms and the environment in which they exist and interact.

#### COURSE DURATION: 30 HOURS COURSE FEES: ₹500 MODE OF STUDY: ONLINE

Eligibility: Learners studying in undergraduate course in the parent institute and also students from neighbouring institute

To register login to:https://sac-elearning.com/

Dr Nagaraj KK Course Co-ordinator Rev Dr Praveen Martis SJ Principal Course Name: CERTIFICATE COURSE IN FOOD MICROBIOLOGY

**Course Duration:** 30 Hours

Course Type: CC

Mode: Online

MODULE I: FOOD AS SUBSTRATE FOR MICROBES AND FOOD PRESERVATION - (15 HOURS)

Food as a substrate for microorganisms: Intrinsic and extrinsic factors affecting microbial growth in food.

Principles of food preservation: Removal of microorganisms; anaerobic conditions; High temperature; Low temperature; Drying; Food additives.

#### MODULE II: FOOD SPOILAGE AND FOOD-BORNE DISEASES - (15 HOURS)

Contamination and spoilage: Cereals; vegetables and fruits; meat and meat products; milk and milk products; fish and seafood; canned foods.

Food-borne diseases: Foodborne infections and intoxications; Mycotoxins.