

# MICROBIOLOGY LEC/LAB (MCBC)

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## **MCBC 2010 Microbiology for Health Sciences**

**Credit Hours:** 4

**Prerequisites:** BSCC 1010 or BSCC 1010H with a grade of "C" or higher

**General Education Category:** Science Gen Ed

**Lab Fee:** Yes

Meets General Education requirement. A study of the morphology, physiology, and metabolism of microorganisms; methods of media preparation; culturing and control of selected pathogens and sterilization/disinfection techniques; industrial applications of microbiology; and bacterial genetics. Students will develop knowledge, comprehension, and performance skills applicable to professional growth in: (a) the structure, metabolism, and activities of microbes including viruses, bacteria, protists, animals and fungi, (b) the major issues of microbiology, especially those related to human health and the environment, (c) the techniques of asepsis, staining, test interpretation, and culture, (d) the role and functional importance of the microbial world and its influences on professional and leisure life, and (e) fundamental techniques used in microbiology laboratories. Three hours lecture; three hours lab per week.

## **MCBC 2948 Service-Learning Field Studies 1**

**Credit Hours:** 1

This course gives the student the opportunity to understand the relationship of theory to practice through participation in a service-learning experience. Students are required to complete 20 hours of volunteer work, a service-learning contract, and an oral and written reflection of the experience.

## **MCBC 3020 Biology of Microorganisms**

**Credit Hours:** 5

**Prerequisites:** BSCC 1010, CHM 2210, and CHML 2210 - all courses with a grade of "C" or higher or completion of an AS in Veterinary Technology, Dental Hygiene, Medical Laboratory Technology, Respiratory Technology or Nursing

**Lab Fee:** Yes

Upper level course in microbiology designed for majors as well as those enrolled in pre-professional programs. This course includes treatment of microorganisms including archaeans, bacteria, viruses, protists, protozoans, and certain fungi. Also includes topics such as history, taxonomy, comparative microbiology, pathological microbiology, microbial physiology and metabolism, microbial genetics, and applied and ecological microbiology.