

## Faculty of Pharmacy

### Basic and Pharmaceutical Microbiology

#### Information :

**Course Code :** PMI 312

**Level :** Undergraduate

**Course Hours :** 4.00- Hours

**Department :** Faculty of Pharmacy

#### Instructor Information :

Title	Name	Office hours
Professor	AMAL EMADELDINE ALI MOHAMED	4
Professor	Yasser EIMohammadi Mohamed Ragab	1
Teaching Assistant	Aya Mostafa Mahmoud Ghareeb	5
Teaching Assistant	Eman Abdel Baset Mohamed Mohamed	3

#### Description :

The course covers the fundamental aspects of microbiology including: taxonomy, structure, physiology, growth, reproduction and genetics. Basic techniques for culturing, staining, counting and identifying microorganisms are emphasized in the laboratory. The course will emphasize physical and chemical methods of control such as heat, radiation, and chemical sterilization. Classes and modes of action of chemotherapeutic agents and non antibiotics antimicrobial agents will be addressed. The course will also cover the mechanisms of development of resistance with emphasis on the biochemical and genetic basis of resistance; plasmids, transposons and inversion sequences as related to drug resistance. The course includes also the concepts of Microbial Quality Control and Quality Assurance as they apply to the pharmaceutical industry, laboratory procedures such as aseptic technique, enumeration and identification of micro-organisms from commercial products. Evaluation of antimicrobial effectiveness of disinfectants, preservatives and antibiotics, also vitamins assays.