



Course Title:

Pharmaceutical Microbiology

Academic year/level: 2nd year (1st and 2nd semester)

Lectures: 2 hrs/week **Practical:** 1.5 hrs/week **Total:** 3.5 hrs/week

Aims of the program

The course is designed to provide an understanding of microbial functional relationships, taxonomy, growth, metabolism, genetics and the basic principles as well as applications of pharmaceutical microbiology in control of microbial contamination and in sterilization methods.

Course Content

Topics	Total	Lecture	Practical	Tutorial
	(No. of hours)	(No. of hours)	(No. of hours)	(No. of hours)
1- General microbiology including: -Introduction -Members of microbial world and taxonomy -Bacterial structure -Metabolism and bacterial growth -examples of pathogenic bacteria -viruses and their replication	24	8	12	4
2- Sterilization of pharmaceuticals	14	8	2	4
3- Disinfectants, antiseptics and preservatives	12	6	2	4
4- Antibiotics	19	12	3	4
5- Quality control	13	6	3	4
6- Genetics and Biotechnology	18	12	2	4
Total	100	52	24	24