| Course Title      | Microbial biochemistry | /                |
|-------------------|------------------------|------------------|
| Course Code       | BC5108                 |                  |
| Course type       | Optional               |                  |
| Academic Year     | 2016/2017              |                  |
| Coordinator       | Prof. Tarek M. Mohamed |                  |
| Other Staff       | Mai El-Keiy            |                  |
| Semester          | Semester 2             |                  |
| Level             | Level one              |                  |
| Pre-Requisite     | BC5101                 |                  |
| Course Delivery   | Lecture                | 14 x 1h lectures |
|                   | credit                 | 1h               |
| Parent Department | Chemistry Department   |                  |

## Contents

| Contents   |   |
|------------|---|
|            | (one hour/week)   |
| Lecture 1  | Principles and practices of sterilization:  |
| Lecture 2  | Clean and aseptic areas and GMP   |
| Lecture 3  | Antimicrobial agents and their evaluation:  |
| Lecture 4  | Antimicrobial agents and their evaluation:  |
| Lecture 5  | Microbiological aspects of pharmaceutical processing  |
| Lecture 6  | Microbial Contamination and spoilage of Pharmaceutical<br>Products                                    |
| Lecture 7  | Activity  |
| Lecture 8  | Traditional biotechnology:  |
| Lecture 9  | Molecular biotechnology: fundamentals of recombinant<br>DNA technology                                |
| Lecture 10 | Molecular biotechnology: production of therapeutically  |
|            | useful substances by recombinant DNA technology   |
| Lecture 11 | Additional applications of microorganisms in the sciences   |
| Lecture 12 | Microbiological Assays in Pharmacy. The principles and techniques of microbiological assays of drugs. |
| Lecture    | Microbiological Tests in Pharmacy. The principles and   |
| 13,14      | techniques of microbiological analysis and tests; quality<br>assessment of drugs, cosmetics and food. |