# STANDARD COURSE OUTLINE

Annex 3

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|---|---|---|
| **Hashemite University** | | Course name and number<br>General Microbiology<br>110104241 |
| **Faculty of Science** | | **Pre-requisite:** |
| **Department of Biology and Biotechnology** | **Course Syllabus** | **General Biology 101** |

| **Course Information** | |
|---|---|
| Lecture's Time | Sun, Tue 8.30- 9.30 |
| Lecture Room | H B 207 |
| Instructor | Dr Bayan Abu Ghazaleh |
| Office Location | Biology Department |
| Office Hours | To be announced |
| **Text Book**<br>Microbiology, Principles and Explorations. Black, J.G. 7th ed., John Wiley and Sons, 2008 | |
| **References(s)** | General microbiology books in the library |

## Grading Policy:

| **Theory** | | **Practical** |
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| 1st Exam | 20% | |
| 2nd Exam | 20% | Midterm __% |
| Other | 20% | Reports __% |
| Final Exam | 40% | __% |

## Course Objectives

The study of the nature of microorganisms; their structure and function. The study of growth and cell division in microorganisms, and environmental conditions needed for their growth. The study of metabolism and interaction with the environment, gene transfer between bacteria, and methods used to eradicate microorganisms.

## Teaching and Learning Methods

- PowerPoint lectures and active classroom based discussion
- Collaborative learning through small groups acting in an interdisciplinary context.
- Relevant films and documentaries
- Video lectures
- E-learning resources: e-reading assignments and practice quizzes throughModel and Microsoft Team

## Course Contents

| Week | Topic |
|---|---|
| 1 | **Scope and history of microbiology** |
| 2 | **Scope and history of microbiology** |
| 3 | **Microbial metabolism** |
| 4 | **Growth and cell division** |
| 5 | **Factors affecting growth** |
| 6 | **Factors affecting growth** |
| 7 | **Gene transfer** |
| 8 | **Gene transfer** |
| 9 | **Sterilization and disinfection** |
| 10 | **Chemical antimicrobial agents** |
| 11 | **Chemical antimicrobial agents** |
| 12 | **Physical antimicrobial agents** |
| 13 | **Physical antimicrobial agents** |
| 14 | **Antimicrobial therapy** |
| 15 | **Antimicrobial therapy** |
| 16 | Final Examination |