Philadelphia University
Faculty of Science
Department of Biotechnology & Genetic Engineering
First semester, 2014/2015

Course Syllabus

Course Title: Practical General Biology lab	**Course code: 240106**
Course Level: First year	**Course pre- or co-requisite: General Biology 1**
Lecture Time: Sec. 1 ,2 Wed. Thu. 13:10 – 16:00	**Credit hours: 1**

Academic Staff Specifics

Name	Rank	Office Number and Location	Office Hours	E-mail Address
Esraa Al-haj ali	**Lecturer**	**1016/ Department of Biotechnology**	**11- 12 am Daily**	**ealhajali@philadelphia.edu.jo**

Course module description:

Includes laboratory safety rules; types and use of microscopes; experiments on detection of carbohydrates, lipids, proteins and . Enzymes and the effect of physical factors; prokaryotic and eukaryotic cells; cell division, metabolism, animal tissues and plant tissues.

Course module objectives:

1. The course will provide the students with the basic understanding of the fundamental principles of practical biology.
2. This course aims to provide the students with the basic fundamentals tools and skills to reinforce the concepts covered in the lectures of the general biology course (240101). It is my hope that this course will help you develop the skills, habits and intellectual practices needed to be a successful independent learner.
3. The topics covered in this course will allow the students to better comprehend other practical courses during the following academic years.

Course/ module components:

Lab Sheets will be provided during course

Teaching methods:

Lectures, experiments, Result discussion, Reports, Tutorials, problemsolving, debate, etc.

Learning outcomes:

- **Knowledge and understanding**

At the end of this module, student will be able to:

* Follow and apply the laboratory safety rules during the laboratory time.
* Describe the characteristics and compounds that make up living things.
* Discuss how matter and energy are interrelated in photosynthesis and cell respiration.
* Identify key cell organelles and relate their function to their structure.
* compare and contrast mitosis and meiosis in terms of their goals and outcomes.
*Gain knowledge of the anatomical structure of plants tissues .
* Gain knowledge of the anatomical structures of animal tissues .

Assessment instruments

- Short reports and/ or presentations, and/ or Short research projects
- Quizzes.
- Home works
- Final examination: 40 marks

Allocation of Marks	
Assessment Instruments	**Mark**
Midterm examination	**30 %**
Final examination: 40 marks	**40%**
Reports, research projects, Quizzes, Home works, Projects	**30 %**
Total	**100%**

Documentation and academic honesty

- Documentation style (with illustrative examples)

- Protection by copyright
- Avoiding plagiarism.

Course/module academic calendar

week	Basic and support material to be covered
(1)	**Laboratory safety rules**
(2)	**The Microscope**
(3)	**The cell**
(4)	**Macromolecules**
(5)	**Biological membrane**
(6)	**Midterm Exam**
(7)	**Enzymes**
(8)	**Metabolism**
(9)	**Cell division**
(10)	**Animal tissues**
(11)	**Plant tissues**
(12)	**Revision**
(13)	**Final Exam**

Expected workload:

On average students need to spend 2 hours of study and preparation for each 50-minute lecture/tutorial.

Attendance policy:

Absence from lectures and/or tutorials shall not exceed 15%. Students who exceed the 15% limit without a medical or emergency excuse acceptable to and approved by the Dean of the relevant college/faculty shall not be allowed to take the final examination and shall receive a mark of zero for the course. If the excuse is approved by the Dean, the student shall be considered to have withdrawn from the course.