

**Syllabus**

General Biology Laboratory

BIOL 111 2nd Sem. 15/16

**Instructors:**

**DR. Ahed Abdulkhaliq: Coordinator**

**Dr. Jamil Harb, Ms. Yara Ibrahim**

**Objective:** This laboratory course is designed to introduce students to biological experimentation. Many aspects of general biology that are taught in introductory biology are covered, from prokaryotic and eukaryotic cells to biological macro-molecules, and from metabolism to anatomy of vertebrates and invertebrates. The scope of this course extends throughout the biological world.

**Lab Manual:** Abdulkhaliq, A. and S. Beituni; J. Stiban (ed.). ***Biology 111 Lab Manual***, 5th Ed. (2012).

**Evaluations:** Students will be evaluated on their work in the course as follows:

* Quizzes and Participation 25 %
* Lab reports 15 %
* Unknowns 20%
* Final Exam ––––––––––––– 40 %

**Quizzes:** Students are expected to come to the lab prepared. Expect a short quiz at the beginning of each lab on the material to be discussed *in the lab you are going to take!* ***Prepare each experiment well!!***

**Lab Evaluation:** After each lab, a lab report (or a lab sheet) discussing the experiments and the results is required. Lab reports are due at the beginning of the next lab session whereas lab sheets are filled and completed after the experiments are over. Students are expected to finish general biology with good knowledge of basic lab techniques used in modern biology.

**Lab Outline:**

|  |  |  |
| --- | --- | --- |
| *Experiment* | *Title* | *Date* |
| 1 | The Microscope | Week 2 |
| 2 | The Cell | Week 3 |
| 3 | Biological Membranes | Week 4 |
| 4 | Carbohydrates | Week 5 |
| 5 | Lipids, Proteins and Vitamins | Week 6 |
| *6* | Cellular Activities | Week 7 |
| 7 | Cell Division – Mitosis | Week 8 |
| 8 | Genetics | Week 9 |
| 9 | The Diversity of Life | Week 10 |
| 10 | Cellular Organization – Animal Tissues | Week 11 |
| 11 | Anatomy of Ascaris and Earthworm | Week 12 |
| 12 | Anatomy of the Rat | Week 13 |
| 13 | ***LAB FINAL EXAM*** | Week 14 |
|  |  |  |

☺The best of luck for all ☺