

The Hashemite University Faculty of Science Course Syllabus

## Department of Biology and Biotechnology

Course Title: Cell Biology Pre-requisite: Biology I Designation: Required

**Instructor's E-mail**:

salim\_dr-1954@hotmail.com

**Course Number: 110104231** 

Credit Hours: 2(2+0)
Instructor: Dr.Salim
Abderrahman

Office Hours: 8-9 (Sunday),12-1 (Tuesday), 10:30-11:30 (Wednesday)

**Course Description** (**Catalog**): This course covers the study of of some techniques used in cell biology, including the ultrastructure and function of cell membrane, , organelles structure and functions ,nuclear envelope ,structure and function of chromatids, RNA replication ,protein synthesis ,structure and function of muscles and motility of cells.

**Text Book**: The World of the Cell. By Wayne M.Becker, Lewis .J. Kleinsmith and Jiff Hardin and Gregory Bertoni.2009. Sevenxth ed. Pearson, Benjamin Cummings.

**References**: Molecular Cell Biology. K.Martin,M Kreiger,A Brescher,H ploegh,A Amon,H Lodish,C Kaiser and A Berk.2016.Eight ed., Macmillan Learning,

## **Other Resources:**

- 1. CD-Rom provides with the textbook
- 2. Website www. awlonline. corn /becker

## **Major Topics Covered:**

Topics	No. of Weeks	Contact Hours*
An introduction to The World of the cell	1	1
Principles and Techniques of Microscopy	1	4
Membranes: Their Structure and Chemistry	1	4
Membranes: Chemistry	1	3
Transport Across Membranes I &II	2	5
Enzymes Intracellular Compartments: Endoplasmic Reticulum, Golgi Complex, Lysosomes and Microbodies	2 2	6 4
Energy Flow in Cells: Mitochondria and cellular respiration	1	5
Energy Flow in Cells: Chloroplasts and Photosynthesis	2	6
Information Flow in Cells: DNA, Chromosomes and the Nucleus	1	4
Cytoskeleton Structure and Function	1	3
Total	15	45

<sup>\*</sup>Contact Hours include lectures, labs and exams.

## **Grading Plan:**

First Exam: 30 points 4-8/03/2018 Second Exam: 30 points 8-12/04/2018

Final Exam: 40 points To be announced later

**General Notes:** (Attendance Policy) students are expected to attend every class If you miss more than 6 classes for the (Sunday, Tuesday, and Thursday model) or 4 classes for the (Monday and Wednesday Model), you cannot pass the course. Makeup excuses will be accepted only for limited and is designed to justified cases only.