



**The Hashemite  
University  
Faculty of Science  
Course Syllabus**

Department of Biology and Biotechnology

---

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

**Course Number:** 110104231  
**Credit Hours:** 2(2+0)  
**Instructor:** Dr.Salim  
Abderrahman

**Instructor's E-mail:**  
[salim\\_dr-1954@hotmail.com](mailto:salim_dr-1954@hotmail.com)

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

---

**Course Description (Catalog):** This course covers the study 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](http://www.awlonline.com/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 <b>I &amp; II</b>	2	5
Enzymes	2	6
Intracellular Compartments: Endoplasmic Reticulum , Golgi Complex, Lysosomes and Microbodies	2	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
<b>Total</b>	<b>15</b>	<b>45</b>

\*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.