



Faculty of Science
Department of Biology and Biochemistry
Summer Semester 2020
Course Syllabus // Online course

Course information:

Course code & number: BIOL 131

Course title: General Biology

Prerequisite:

Instructor information:

Instructor name: Dr. Mahmoud Srour

Lectures: Five lectures per week (70 minutes each): SM 9:00-10:50, TWR 9:00-10:20 (Room SCI240).

Credit hours: 3 credit hours

Office hours: Posted on Ritaj and on the office door

Office phone number: 2982162

Email: msrour@birzeit.edu

Course description: Introduction to the chemical basis of life, the basic unit of life (the cell) in terms of structure and function, photosynthesis, cellular respiration, cell reproduction (mitosis and meiosis), genetics and different biological systems of the body like the digestive, respiratory, circulatory, reproductive systems.

Course goals:

The major goals of this course are to:

- Explain the principles of evolution, origin of life, and history of life on earth.
- Explain the basic chemistry of living things, from atoms to simple molecules to complex macromolecules
- Study the structure of cell
- Study the biochemical processes within a cell and living things, including the circulatory, respiratory, and digestive systems.
- Explain the basics of heredity
- Study the structure, replication, and function of the genetic material

Course outcome:

By the completion of this course the student is expected to:

1. Understand basic concepts of biology including evolution and basic biological processes.
2. Understand basic concepts of biochemistry.
3. Know structure and function of eukaryotic and prokaryotic cells.
4. Understand cell and organisms physiology. Explain basic processes such as cellular respiration, photosynthesis, and the working of major animal systems like the respiratory, circulatory, and digestive systems.
5. Know basic concepts of genetics and heredity.

Course topics and contents:

#	Lectures	Chapter	Topic	Assignments and due dates
1	2	1	Introduction	
2	2	3	Water	
3	4	5	Large biological molecules	
4	4	6	A tour of the cell	
			First hour exam	15/7/2019 Ch. 1, 3, 5, 6
5	2	7	Membranes structure and function	
6	3	9	Cellular respiration	
7	2	10	Photosynthesis	
8	2	12	Cell cycle	
			Second hour exam	1/8/2018 Ch. 7, 9, 10, 12
9	2	13	Meiosis	
10	2	14	Mendel and the gene idea	
11	2	41	Animal nutrition	
12	3	43	Circulation and gas exchange	
13	2	46	Animal reproduction	
14			Final Exam	<i>Final chapters only</i>

Teaching and learning methodologies:

Lectures will be delivered online via ZOOM and ITC. The ZOOM link will be sent via RITAJ. Lectures will be recorded and saved on the ZOOM cloud. The link for lectures' recordings will be posted on RITAJ.

In the lecture PowerPoint slides will be used Structure of lectures will vary to include lectures, multimedia presentations, films and discussions.

Course assessment details:

Assessments will be conducted online via ITC. The grade distribution is as follows:

Methods of assessment	Relative weight %
Short quizzes	50%
Participation	10%
Final exam	40%

Text book:

Author	Title	ISBN -13	Edition	Publisher
Reece, J. B. <i>et al.</i>	<u>Campbell</u> <u>Biology, 10th</u> <u>ed.</u>	9780321823717	10 th	Pearson Education

Grading scale:

BZU grading scale is as follows: Excellent 90-99; Very good 80-89; Good 70-79; Acceptable 60-69; Fail <60.

Students with Disabilities:

I encourage students with disabilities, including “invisible” disabilities such as chronic diseases, learning, and psychological disabilities, to explain their needs and appropriate accommodations to me during my office hours. Please bring a verification of your disability for accommodating your needs.

University honor code

Academic Honesty:

You are expected to comply with the university honor code. Please read it on Ritaj <https://ritaj.birzeit.edu/university-laws/#>