

BIOL-103: Biology in Everyday Life
Fall 2018

September 9 – January 13

Instructor: Dr. Joëlle Nader-Nasr

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Office Hours: UTR 10:00 AM - 12:00 PM; or by appointment

Meeting time/Location

Lecture: Section 1 UTR, 9:00 AM - 9:50 AM; Liberal Arts Building, B207

Section 2 UTR, 12:00 PM - 12:50 PM; Liberal Arts Building, B112

Lab: Section 1 R, 2:00 PM - 4:45 PM; Central Campus C015

Section 2 U, 2:00 PM - 4:45 PM; Central Campus C015

Section 3 R, 10:00 AM - 12:45 PM; Central Campus C015

Catalog Course Description:

An exploration of biological concepts related to everyday life. The student is introduced to the basic principles that govern the biological world. Topics include cell structure and function, energy and metabolism, evolution and diversity of life, plant structure and function, animal anatomy and physiology, and genetics. A required laboratory is part of the course.

Student Learning Outcomes:

Upon successful completion of this course, the student should be able to:

- Understand concepts of basic biological sciences.
- Understand the nature of scientific inquiry and the principles that guide scientists.
- Apply scientific methodology
- Demonstrate the ability to draw and communicate conclusions based on observation, and analysis.

More specifically, the student will learn to:

1. Define “Science” and describe the scientific method of inquiry.
2. Define “Biology” and describe the hierarchical level of organization.
3. Understand the importance of molecules of life.
4. Identify a cell, its composition and the similarities and differences between prokaryotic and eukaryotic cells.
5. Understand and explain the way cells communicate with each other.
6. Describe the structure and function of DNA.
7. Define Genome, Cloning, stem cell replacement therapy, and moral and ethical issues associated with biotechnology
8. Appreciate the diversity of living things
9. Describe and understand the major systems and functions of the human body.

Textbook:

Biology, A Guide to the Natural World / David Krogh. Fifth edition, Benjamin Cummings 2011.

Assessment: The final grade for the semester will be weighted as follows:

Unit tests	30 %
Final exam	25 %
Quizzes	20 %
Assignments	15 %
Participation	10 %
Total	100 %

Unit tests: Three periodic exams will be given. These exams will be mostly composed of multiple choice questions. The exams' dates are tentatively shown in the schedule at the end of the syllabus.

Final Exam: The final exam will focus mostly on the last chapters. It will be a combination of multiple choice and short answer questions. The date of the final exam will be announced once it becomes available.

Quizzes: There will be periodic ten-fifteen minute quizzes that will cover lecture material, assigned reading and problems from the end of the text chapters. The quiz with the lowest score will be dropped

Assignments: Suggested homework problems from the end of each chapter will be assigned throughout the semester. These assignments are short answer questions and done in groups.

There will be no makeup exams or quizzes. In cases there are exceptional circumstances such as hospitalization or death in the family other arrangements may be made and the student has to provide official documentations.

Grading scale:

94-100	A	4.0
90-93	A-	3.7
87-89	B+	3.3
84-86	B	3.0
80-83	B-	2.7
77-79	C+	2.3
74-76	C	2.0
70-73	C-	1.7
67-69	D+	1.3
64-66	D	1.0
60-63	D-	0.7
59 or lower	F	0
59 or lower	FN	0 (<i>Failure for Non attendance</i>)

Attendance Policy: Missing classes normally leads to poor performance, since participation is central to collaborative learning and linked to the full benefit of the course. Therefore, students are expected to attend class meetings, and roll will be taken at the beginning of each class on regular basis. Please refer to the university guidelines for class attendance and excessive absences in the AUK catalog 2017-2018 (<http://www.auk.edu.kw/catalog/>). “[...]Any student who misses ***MORE THAN 15%*** of the class sessions of any course during a semester should expect to fail, unless s/he submits documented evidence to the course instructor of inpatient medical care, death of an immediate family member, academic instructional activities, or national athletic activities.[...]”

A Student who misses classes, and/or laboratories is responsible for the work that is covered, and /or update himself/herself on class information provided during his/her absence

The last date to withdraw with a “W” is Wednesday, November 21st, 2018.

Academic Integrity Policy: Students are expected to abide by the policy for academic integrity outlined in the AUK student handbook. For example, cheating and plagiarism are violations of University

policies and are considered serious offenses. Anyone caught cheating on an exam, homework, or quiz will be given a zero for that work. A second offense will result in an automatic F grade in this course. Additional penalties may be considered.

Cell Phones: All cell phones must be turned off or silent during the class. Their use is prohibited unless the instructor is made aware, ahead of time, of an urgent situation that requires the use of the cell phone.

Late work: If any student fails to submit an assignment on the due date for a valid reason, the student may still hand it within the next few days, prior to solutions being out in class, with a deduction of 25% of the grade.

Disability Accommodations:

If you believe that you need accommodations for a disability, you are requested to contact Dr. Huda Shaaban (hshaaban@auk.edu.kw), in the Student Counseling Center (2nd floor in the Student Center Building) to arrange an appointment to discuss your needs. You are also welcome to contact me to discuss your academic needs. However, since all disability-related accommodations require registration with the Student Counseling Center and are not applied retroactively, you should contact Dr. Huda Shaaban as soon as possible.

Other Regulations: A student is bound by all rules and regulations appearing in the Student Handbook provided by the AUK

Tentative Course Schedule

Week Number	Date	Lecture Topics	Assignments
Week # 1	Sept. 9 Sept. 13	Introduction to the course and Syllabus Sept.11: University closed; Islamic New Year Ch.1: Science as a way of learning	
Week # 2	Sept. 16-18-20	Ch.1: continued	
Week # 3	Sept. 23-25-27	Ch.2-3: Water and the Molecules of life	
Week # 4	Sept. 30 Oct. 2-4	Ch.2-3: continued Ch.4: Life's home, the cell	Quiz #1 (chapter 1)
Week # 5	Oct. 7-9-11	Ch.4: continued	Assignment #1 (chapters 2-3)
Week # 6	Oct. 14-16-18	Ch.4: continued Exam 1 Oct. 18	Assignment #2 (chapter 4) Exam 1 (chapters 1-4)
Week # 7	Oct. 21-23-25	Ch.5: Life's border: the plasma membrane	
Week # 8	Oct. 28-30 Nov. 1	Ch.7-8: Cellular respiration & photosynthesis	Quiz #2 (chapter 5)
Week # 9	Nov. 4-6-8	Ch.9-10: Cellular reproduction: Mitosis & Meiosis	Assignment #3 (chapters 7-8) <i>Midterm grades due on Nov.4</i>
Week # 10	Nov. 11-13-15	Ch.9-10: continued Exam 2 Nov. 15	Exam 2 (Chapters 5,7-8)
Week # 11	Nov. 18-20	Ch.11-12: Mendel, chromosomes and inheritance Nov.22: University closed; Prophet's Birthday	<i>Last day to withdraw "W"</i> <i>Nov. 21</i>
Week # 12	Nov. 25-27-29	Ch.11-12: continued	Assignment #4 (chapters 9-10)
Week # 13	Dec. 2-4-6	Ch.15: Biotechnology	Quiz #3 (chapter 9-10)
Week # 14	Dec. 9-11-13	Ch. 21-24: Introduction to the diversity of life	Assignment #5 (chapters 11-12)
Week # 15	Dec. 16-18-20	Exam 3 Dec. 16 Ch. 26: Introduction to Human anatomy & physiology	Exam 3 (Chapters 9-12)
Week # 16	Dec. 23 to Jan. 5	No classes : Winter break	
Week # 17	Jan. 6-7	Ch. 26: continued Jan. 7 : Review session; Last day of classes	Assignment #6
Week # 18	Jan. 8-13	Final Exams	FINAL exam (Chapters 15, 21-24 and 26)

This is a tentative syllabus and will be adjusted as needed. Altered regulations or dates for exams will be announced in class.

Good luck with the Fall 2018 semester!