



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

Department of Biology and Biotechnology

Course Title: Genetics

Biology I (110104102)

Designation: Required

Instructor's E-mail:

salim_dr_1954@hotmail.com

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

Course Number: 110104221

Credit Hours: 3(2+3)

Instructor: Dr. Salim
Abderrahman

Course Description (Catalog): This course covers the study of the basic principles of Mendelian genetics, statistical and family analysis, sex determination, linkage, cytogenetics, chromosomal aberration, molecular structure of gene, its replication and transcription and mutation, population genetics.

Text Book: Essentials of Genetics, 10th Edition, William Klug, Michael Cummings, Charlotte Spencer and Michael Palladino, Pearson 2019.

References: Principles of Genetics, 7th Edition, D. Peter Snustad and Michael J. Simmons. Wiley, 2015.

Human Genetics, McGraw-Hill Education; 10 Edition, 2011.

Genetic Diseases <https://www.everydayhealth.com/genetic-diseases/>

Major Topics Covered:

Topics	No. of Weeks	Contact Hours*
An introduction to genetics	1	2
Cell division	1	4
Mendelian genetics	1	4
Non-Mendelian inheritance, Modification of Mendelian ratios	1	5
Sex determination and sex chromosomes	1	2
Linkage and chromosome mapping. Gene expression: transcription	2	4
DNA structure and analysis	2	6
Gene expression: translation DNA replication and recombination	2	6
Genetics of bacteria and bacteriophages	2	6
Population genetics	2	6
Total	15	45

*Contact Hours include lectures, labs and exams.

Grading Plan:

First Exam: 30 points 06/03/2018

Second Exam: 30 points 10/04/2018

Final Exam: 40 points To be announced later

General Notes: (Attendance Policy) students are expected to attend every class and arrive on time in compliance with HU regulations. If the student absents in 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 justified cases

