



**Jordan University of Science and Technology**  
**Faculty of Science & Arts**  
**Applied Biological Sciences Department**

BIO101 General Biology (1)

First Semester 2017-2018

**Course Catalog**

3 Credit Hours. Biology 101 is dedicated to the study of the molecular and cellular basis of life. Topics include cell structure and function, information flow, metabolism, cellular reproduction, Mendelian and modern genetics. This course is designed for students planning to major in biotechnology, genetics or a related disciplines.

**Text Book**

|                          |   |
|--------------------------|---|
| <b>Title</b>             | Biology: A global Approach                      |
| <b>Author(s)</b>         | Campell, Urry, Cain, Wasserman, Minorsky, Reece |
| <b>Edition</b>           | 10th Edition                                    |
| <b>Short Name</b>        | 1   |
| <b>Other Information</b> | 11th edition Pearson Education Inc.             |

**Course References**

**Instructor**

|                 |  |
|-----------------|--|
| Name            | <b>Dr. Qutaiba Ababneh</b>   |
| Office Location | PH1L1  |
| Office Hours    | Sun : 08:30 - 10:00<br>Mon : 08:30 - 10:00<br>Tue : 09:00 - 10:30<br>Wed : 11:30 - 13:00 |
| Email           | qoababneh@just.edu.jo  |

**Class Schedule & Room**

Section 1:  
Lecture Time: Mon, Wed : 10:00 - 11:30  
Room: SCIENCE HALL1

| Tentative List of Topics Covered |                                      |                     |
|----------------------------------|--------------------------------------|---------------------|
| Weeks                            | Topic                                | References          |
| Weeks 1, 2                       | Biological Macromolecules and Lipids | 5 (114-139) From 1  |
| Weeks 3, 4                       | Cell Structure and Function          | 7 (163-195) From 1  |
| Week 5                           | Cell Membranes                       | 8 (196-212) From 1  |
| Week 6                           | Cell Respiration                     | 10 (236-258) From 1 |
| Week 7                           | Photosynthetic Processes             | 11 (259-283) From 1 |
| Week 8                           | Mitosis                              | 12 (284-302) From 1 |
| Week 9                           | Sexual Life Cycle and Meiosis        | 13 (304-318) From 1 |
| Weeks 10, 11                     | Mendelian Genetics                   | 14 (319-343) From 1 |
| Weeks 11, 12                     | Linkage and Chromosomes              | 15 (344-363) From 1 |
| Weeks 13, 14                     | Nucleic Acids and Inheritance        | 16 (364-384) From 1 |

| Mapping of Course Objectives to Program Student Outcomes <sup>1</sup>  | Assessment method |
|--|-------------------|
| Describe the basic properties of the major classes of biological molecules needed for life [1A]  | First Exam        |
| Compare and contrast the structures, membranes, reproduction, and subcellular characteristics and functions of prokaryotic and eukaryotic cells [1A] | First Exam        |
| Describe and explain the principles of Bioenergetics [1A]  |                   |
| Describe the importance of cell division in maintaining the continuity of life [1A]  |                   |
| Define and apply the principles of Mendelian genetics and its modern extensions to the unity and diversity of life [3A, 1D]                          |                   |
| Understand the molecular, structural and chromosomal basis of heredity. [1A]   |                   |

| Relationship to Program Student Outcomes (Out of 100%) |   |   |      |   |   |
|--|---|---|------|---|---|
| A  | B | C | D    | E | F |
| 97.50  |   |   | 2.50 |   |   |

| Evaluation      |        |
|-----------------|--------|
| Assessment Tool | Weight |
| First Exam      | 20%    |
| Second Exam     | 20%    |
| Quizzes         | 15%    |
| Projects        | 5%     |

|            |     |
|------------|-----|
| Final Exam | 40% |
|------------|-----|

| <b>Policy</b>    |   |
|------------------|---|
| Class Attendance | Your class attendance is mandatory. Absences in excess of 20% of the total lecture hours will result in your being dropped from the course with a failing grade   |
| Makeup Exams     | Make-up exam appeals should be filed within one week of the missed exam   |
| Cell phones      | Cell phones are completely prohibited during examinations according to the university regulations i.e. you are not allowed to bring your phone into the exam hall |
| Cell phones      | Cell phones must be turned off during lectures. No incoming or outgoing calls or text messages are allowed  |
| Cheating         | Unethical conduct, including cheating during examinations, will result in punishment by the university administration   |

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