

**TISHK INTERNATIONAL UNIVERSITY**  
**FACULTY OF APPLIED SCIENCE**  
**Department of MEDICAL ANALYSIS,**  
**-2022 Spring**  
**Course Information for MA 102 GENERAL BIOLOGY II**

<b>Course Name:</b> GENERAL BIOLOGY II					
<b>Code</b> MA 102	<b>Regular Semester</b> 2	<b>Theoretical</b> 2	<b>Practical</b> 2	<b>Credits</b> 3	<b>ECTS</b> 5
<b>Name of Lecturer(s)- Academic Title:</b> Mehmet Özdemir - PhD					
<b>Teaching Assistant:</b> Ms. Zahra					
<b>Course Language:</b> English					
<b>Course Type:</b> Main					
<b>Office Hours</b> 2 hours					
<b>Contact Email:</b> mehmet.ozdemir@tiu.edu.iq Tel:07508170410					
<b>Teacher's academic profile:</b> PhD					
<b>Course Objectives:</b> To familiarize students with the biology science in deep - To introduce the aspects of biology and their applications - To link the biological processes in science with students real life. - To IN light students with branches of biology and their importance. also to make students to be familiar with critical points of biology and connecting to the medical analysis.					
<b>Course Description (Course overview):</b> This course is the second part of our general biology course. Following part 1 of the course, this section is aimed at continuing the education of our students in the principal aspects of the science of Biology. With a greater breadth of knowledge in this science, students will have a better understanding of Biology. As aforementioned, it is critical for the ability of students to develop an understanding of more specific biological processes and terminologies with an encompassing comprehension and for their informed application and use in healthcare.					

**COURSE CONTENT**

Week	Hour	Date	Topic
1	2	27-31/3/2022	Cell Growth and Division// Cell Cycle, Mitosis,
2	2	3-7/4/2022	Mitosis and Regulation of Cell Cycle(Cancer)
3	2	10-14/4/2022	Mitosis and Asexual Reproduction
4	2	17-21/4/2022	Meiosis and Sexual Life Cycles
5	2	24-28/4/2022	Overview and Quiz
6	2	8-12/5/2022	Cells and Energy-Overview of Photosynthesis
7	2	15-19/5/2022	Midterm Exam
8	2	22-26/5/2022	Cellular Respiration and Fermentation Detail
9	2	29/5-2/6/2022	Principle of Ecology
10	2	5-9/6/2022	Energy in Ecosystem
11	2	12-16/6/2022	Matter Cycle
12	2	19-23/6/2022	Final Exam
13	2	26-30/6/2022	Final Exam

**COURSE/STUDENT LEARNING OUTCOMES**

1	Understand the themes and .Cell cycle and cell division
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2	Compare and contrast different methods of energy production and explain the importance of energy to sustain the organizational levels of life
3	Overview of Photosynthesis and Cellular respiration
4	Describe the complexity of Asexual and sexual reproduction
5	To develop an awareness of the relationships existing between the biological and physical worlds and their interrelationships

**COURSE'S CONTRIBUTION TO PROGRAM OUTCOMES**

(Blank : no contribution, I: Introduction, P: Profecient, A: Advanced )

**Program Learning Outcomes**

**Cont.**

1	Evaluate clinical laboratory data by interpreting laboratory results and relating the data to various disease states.	
2	apply principles of evidence-based medicine to determine clinical diagnoses.	
3	apply the basic principles of gross and microscopic anatomy, physiology, biochemistry, immunology, microbiology/virology.	I
4	formulate and implement acceptable treatment modalities to various disease states.	I
5	use technology effectively in the delivery of instruction, assessment, and professional development.	A
6	exhibit essential employability qualities by demonstrating laboratory safety, analyzing laboratory results, and displaying professional conduct.	A
7	exhibit organizational skills, accountability, and ethical behavior.	A
8	apply skills needed in operating laboratory equipment for testing, assessing quality assurance for lab equipment, and adhering to standard safety practices in the laboratory environment.	P
9	apply problem-solving and decision-making skills.	P
10	apply and promote health policies and regulatory standards in the field career.	
11	develop research in the field of medical analysis using qualitative and quantitative methods.	A

<b>Prerequisites (Course Reading List and References):</b>	Textbook-Biology, Concepts of Biology; Sylvia S. Mader. Third Edition. 2014. McGraw-Hill, Lecturer notes.
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<b>Student's obligation (Special Requirements):</b>	Please keep in mind the following notices:1- eat and drink outside the classroom 2- put your mobile in your pocket in the silent mode during the courses 3- be on time and enter the class before the lecturer 4- lecture and laboratory attendance are required 5- Collectively, absences of 15 % of labs and 20 % lecture courses will ground the student for automatic failure.
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<b>Course Book/Textbook:</b>	Textbook: Concepts of Biology; Sylvia S. Mader. Third Edition. 2014. McGraw-Hill, Biology; Houghton Mifflin Harcourt, Biology; the study of life.
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<b>Other Course Materials/References:</b>	Lectures, Publications- watch videos
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<b>Teaching Methods (Forms of Teaching):</b>	Lectures, Practical sessions, Presentation, Assignments, , ,
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**COURSE EVALUATION CRITERIA**

Method	Quantity	Percentage (%)
Participation	1	5
Quiz	2	5
Homework	2	5
Midterm Exam	1	20
Laboratory	1	5
Lab/Practical Exam(s)	1	10
Final Exam	1	40
<b>Total</b>		<b>100</b>

<b>Examinations:</b> Essay Questions, True-False, Fill in the Blanks, Multiple Choices, Short Answers, Matching, , ,
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<b>Extra Notes:</b>
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**ECTS (ALLOCATED BASED ON STUDENT) WORKLOAD**

<b>Activities</b>	<b>Quantity</b>	<b>Workload Hours for 1 quantity*</b>	<b>Total Workload</b>
Theoretical Hours	13	2	26
Practical Hours	13	2	13
Final Exam	1	40	40
Participation	1	5	5
Quiz	2	5	10
Homework	2	10	20
Midterm Exam	1		0
Laboratory	1		0
Lab/Practical Exam(s)	1		0
<b>Total Workload</b>			<b>114</b>
<b>ECTS Credit (Total workload/25)</b>			<b>4.56</b>

**Peer review**

Signature:  
Name:  
Lecturer

Signature:  
Name:  
Head of Department

Signature:  
Name:  
Dean