

# GENERAL BIOLOGY I

<b>1</b>	Course Title:	GENERAL BIOLOGY I	
<b>2</b>	Course Code:	MBG1001	
<b>3</b>	Type of Course:	Compulsory	
<b>4</b>	Level of Course:	First Cycle	
<b>5</b>	Year of Study:	1	
<b>6</b>	Semester:	1	
<b>7</b>	ECTS Credits Allocated:	5.00	
<b>8</b>	Theoretical (hour/week):	3.00	
<b>9</b>	Practice (hour/week):	0.00	
<b>10</b>	Laboratory (hour/week):	0	
<b>11</b>	Prerequisites:	None	
<b>12</b>	Language:	Turkish	
<b>13</b>	Mode of Delivery:	Face to face	
<b>14</b>	Course Coordinator:	Prof. Dr. AYDIN TÜRKEÇ	
<b>15</b>	Course Lecturers:		
<b>16</b>	Contact information of the Course Coordinator:	Prof.Dr. Sezai Türkel	
<b>17</b>	Website:		
<b>18</b>	Objective of the Course:	The aim of this course is to teach the basic concepts in living systems, cell structure and organization and basic concepts in organization of genetic materials.	
<b>19</b>	Contribution of the Course to Professional Development:		
<b>20</b>	Learning Outcomes:		
		<b>1</b>	Knows the significance of scientific research
		<b>2</b>	Knows the general features of living systems
		<b>3</b>	Knows cellular macromolecules and the organisation of the cell
		<b>4</b>	Knows the general principles of energy conversation in living systems
		<b>5</b>	Knows the basic features of genetic materials
		<b>6</b>	Knows the basic principles of heredity
		<b>7</b>	Knows the general principles of diversity in living systems
		<b>8</b>	Knows the basic concepts of Phylogeny
		<b>9</b>	Knows the general features of animal development
		<b>10</b>	
<b>21</b>	Course Content:		
		<b>Course Content:</b>	
<b>Week</b>	<b>Theoretical</b>	<b>Practice</b>	
<b>1</b>	Introduction, course outline, history and the importance of molecular biology		
<b>2</b>	Chemistry of life		
<b>3</b>	Introduction to cell theory, summary of cell structure		
<b>4</b>	Organization of cell, membrane systems, summary of organel structures and functions		

5	Cell respiration and energy production	
6	Photosynthesis, general organization and energetics	
7	Structure and replication of DNA	
8	General features of transcription and translation	
9	Genetic structures of organisms, mobile genes, genetic engineering	
10	Principles of heredity, summary of the control mechanisms in gene expression	
11	Cell divisions and cellular reproduction	
12	Summary of animal development, immune systems	
13	Biodiversity, selection and adaptation mechanisms	
14	Introduction to concepts in phylogenetics	

22	Textbooks, References and/or Other Materials:	1- LIFE, The Science of Biology, 2011 D. Sadava., D.M. Hillis., H.C.Heller, M.R. Berenbaum.  2- General Biology 1, lecture notes
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23	Assesment	
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TERM LEARNING ACTIVITIES	NUMBER	WEIGHT
Midterm Exam	1	40.00
Quiz	0	0.00
Home work-project	0	0.00
Final Exam	1	60.00
Total	2	100.00
Contribution of Term (Year) Learning Activities to Success Grade		40.00
Contribution of Final Exam to Success Grade		60.00
Total		100.00
Measurement and Evaluation Techniques Used in the Course		

<b>24</b>	<b>ECTS / WORK LOAD TABLE</b>
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Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	3.00	42.00
Practicals/Labs	0	0.00	0.00
Self study and preperation	14	3.00	42.00
Homeworks	0	0.00	0.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	1	30.00	30.00
Others	0	0.00	0.00
Final Exams	1	36.00	36.00
Total Work Load			150.00
Total work load/ 30 hr			5.00
ECTS Credit of the Course			5.00

25	CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS															
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16
ÖK1	0	0	0	0	0	0	0	4	5	5	0	0	0	0	0	0
ÖK2	4	2	2	2	3	3	3	2	2	2	0	0	0	0	0	0
ÖK3	5	2	2	2	2	2	2	2	2	3	0	0	0	0	0	0
ÖK4	4	2	3	2	3	2	2	2	3	3	0	0	0	0	0	0
ÖK5	2	2	4	4	2	3	3	4	4	4	0	0	0	0	0	0
ÖK6	2	5	5	5	2	3	3	3	4	4	0	0	0	0	0	0
ÖK7	1	2	1	1	2	1	2	1	1	3	0	0	0	0	0	0
ÖK8	1	2	2	1	1	3	4	1	1	3	0	0	0	0	0	0
ÖK9	1	2	0	1	1	1	1	1	1	3	0	0	0	0	0	0
<b>LO: Learning Objectives    PQ: Program Qualifications</b>																
<b>Contribution Level:</b>	<b>1 very low</b>			<b>2 low</b>			<b>3 Medium</b>			<b>4 High</b>			<b>5 Very High</b>			