

Molecular Biology and Genetics (English)			
Bachelor	TR-NQF-HE: Level 6	QF-EHEA: First Cycle	EQF-LLL: Level 6

## Programme Structure

1. Semester						
Course Code	Course Name	Language	Dersin Tipi	Theoretical	Application	ECTS
<a href="#">ATA101</a>	Atatürk's Principles and History of Turkish Revolution 1	Turkish	Z	2	0	2
<a href="#">COE103</a>	Computational Thinking	English	Z	3	2	6
<a href="#">DIL101</a>	General English 1	English	Z	2	0	2
<a href="#">MATH109</a>	Calculus 1	English	Z	3	2	6
<a href="#">MBG101</a>	General Biology 1	English	Z	2	0	6
<a href="#">PHYS101</a>	Physics 1	English	Z	3	2	6
<a href="#">SEG001</a>	Manifest of İstinye 1	Turkish	Z	0	1	1
<a href="#">TRK101</a>	Turkish Language 1	Turkish	Z	2	0	2
total						31

2. Semester						
Course Code	Course Name	Language	Dersin Tipi	Theoretical	Application	ECTS
<a href="#">CHEM112</a>	General Chemistry	English	Z	3	0	4
<a href="#">CHEM114</a>	General Chemistry Laboratory	English	Z	0	2	3
<a href="#">DIL102</a>	General English 2	English	Z	2	0	2
<a href="#">MATH112</a>	Linear Algebra with Applications	English	Z	2	2	5
<a href="#">MBG102</a>	General Biology 2	English	Z	3	2	6
<a href="#">MBG110</a>	Basic Genetics	English	Z	2	2	6

SEG002	Manifest of İstinye 2	Turkish	Z	0	1	1
TRK102	Turkish Language 2	Turkish	Z	2	0	2
total						29

### 3. Semester

Course Code	Course Name	Language	Dersin Tipi	Theoretical	Application	ECTS
CHEM211	Principles of Organic Chemistry 1	English	Z	3	2	5
MBG203	Cell Biology	English	Z	2	2	6
MBG209	Microbiology	English	Z	2	4	7
MBG211	Biophysics	English	Z	3	0	6
SEG003	Manifest of İstinye 3	Turkish	Z	0	1	1
	University Elective		S			5
total						30

### 4. Semester

Course Code	Course Name	Language	Dersin Tipi	Theoretical	Application	ECTS
ATA102	Atatürk's Principles and History of Turkish Revolution 2	Turkish	Z	2	0	2
CHEM212	Principles of Organic Chemistry 2	English	Z	3	2	5
MBG202	Molecular Genetics	English	Z	4	0	7
MBG208	Applications in Molecular Biology and Genetics	English	Z	3	0	6
	University Elective		S			5
	University Elective		S			5
total						30

**5. Semester**

Course Code	Course Name	Language	Dersin Tipi	Theoretical	Application	ECTS
MBG301	Human Genetics	English	Z	3	0	4
MBG303	Biochemistry 1	English	Z	2	2	6
MBG305	Molecular Biology of the Cell	English	Z	3	0	5
MBG311	Recombinant DNA Technology	English	Z	3	0	5
	Faculty Elective		S			5
	Department Elective		S			5
	University Elective		S			5
total						35

**6. Semester**

Course Code	Course Name	Language	Dersin Tipi	Theoretical	Application	ECTS
MBG302	Bioinformatics and Biostatistics	English	Z	3	2	6
MBG306	Molecular Evolution	English	Z	3	0	5
MBG308	Molecular Biology Laboratory Techniques	English	Z	2	4	7
MBG310	Biochemistry 2	English	Z	2	2	6
SEG004	Manifest of İstinye 4	Turkish	Z	0	1	1
	Faculty Elective		S			5
total						30

**7. Semester**

Course Code	Course Name	Language	Dersin Tipi	Theoretical	Application	ECTS

MBG491	Capstone Project 1	English	Z	1	8	15
	Department Elective		S			5
	Department Elective		S			5
	Faculty Elective		S			5
total						30

8. Semester						
Course Code	Course Name	Language	Dersin Tipi	Theoretical	Application	ECTS
MBG492	Capstone Project 2	English	Z	1	8	15
	Faculty Elective		S			5
	Department Elective		S			5
	Department Elective		S			5
total						30

Z:Compulsory Courses

S:Seçmeli