

The BIO program recommends students to take at most 5 core courses every semester. The minimum credit requirements (125 credits) can be fulfilled by taking 5 core courses in the 2. and 3. years.

Courses with Black letters indicate courses that should be taken by all BIO majors. Those with red letters indicate courses that may be taken alternatively by students concentrating in different tracks.

Any core course taken after the fulfillment of the core course requirement will count towards the the remaining Area elective requirements. Courses such as CS 201, Math can be taken at any time after the 2. year, including summer semesters.

Curriculum											
Major: BIOLOGICAL SCIENCES AND BIOENGINEERING											
Freshman Year											
CIP101	Civic Involvement Projects I	0	Required	CIP101	Civic Involvement Projects I	0	Required	ENG101	Freshman English I	3	Required
ENG101	Freshman English I	3	Required	ENG102	Freshman English II	3	Required	HIST191	Principles of Ataturk I	2	Required
HIST191	Principles of Ataturk I	2	Required	HIST192	Principles of Ataturk II	2	Required	MATH101	Calculus I	3	Required
MATH101	Calculus I	3	Required	MATH102	Calculus II	3	Required	NS101	Science of Nature I	4	Required
NS101	Science of Nature I	4	Required	NS102	Science of Nature II	4	Required	SPS101	Humanity & Society I	3	Required
SPS101	Humanity & Society I	3	Required	TLL102	Turkish Language and Literature II	2	Required	TLL101	Turkish Language and Literature I	2	Required
TLL101	Turkish Language and Literature I	2	Required	SPS102	Humanity & Society II	3	Required	PROJ102	Project Course	3	
PROJ102	Project Course	3		Total Credits:			17				
MJC100	Major Course			Total Credits:			20				
Sophomore Year											
NS201	Discovering Life	3		NS208	General Biotechnology	3		NS207	Organic Chemistry	4	
NS207	Organic Chemistry	4		ENS210	Computational Biology	3		MATH		3	
MATH		3		NS216	Life on Earth	3		CS201	Introduction to Computing	3	Required
CS201	Introduction to Computing	3	Required	BIO335	Analytical Techniques	3		HUM		3	Required
HUM		3	Required	MATH		3	Required	Total Credits:			16
Total Credits:			16	HUM		3	Required	Total Credits:			18
Total Credits:			20	NS224	Urban Agriculture	3		Total Credits:			18
Junior Year											
BIO332	Cell Biology	3		BIO310	Introduction to Bioinformatics	3		BIO321	Biochemistry I	4	
BIO321	Biochemistry I	4		BIO303	Genetics	3		BIO308	Plant Physiology	3	
BIO308	Plant Physiology	3		BIO301	Introduction to Molecular Biology	4		FASS		3	
FASS		3		BIO322	Biochemistry II	3		SPS303		3	Required
SPS303		3	Required	BIO 304	Biological Structure and Function	3		Total Credits:			16
Total Credits:			16	FASS		3	Required	Total Credits:			19
Senior Year											
ENS491	Graduation Project (Design)	1	Required	ENS492	Graduation Project (Implementation)	3	Required	BIO452	Immunology	3	
BIO452	Immunology	3		BIO330	Environmental Plant Biol	3		BIO447	Plant Breeding	3	
BIO447	Plant Breeding	3		BIO407	Multicellular Organization	3		BIO445	Plant Tissue Culture	3	
BIO445	Plant Tissue Culture	3		BIO467	Signal Transduction	3		BIO404	Plant Biotechnology	3	
BIO404	Plant Biotechnology	3		BIO415	Plant Nutrition	3		BIO466	Biophysics	3	
BIO466	Biophysics	3		FASS		3	Required	BIO306	Microbiology	3	
BIO306	Microbiology	3		Total Credits:			18	Total Credits:			22
FASS		3	Required	Total Credits:			146	Total Credits:			22

Options for Area/Free Electives

PSY350	Biological Basis of Behaviour	3
ENS202	Thermodynamics	3
CHEM301	Inorganic Chemistry	3
PSY303	Cognitive Psychology	3

PSY201	Mind and Behaviour	3
MAT202	Kinetics	4
ENS205	Material Sci	3
CHEM302	Analytical Chemistry	4
PSY450	Topics in Brain, Biology and Behavior	3

University Courses	
Core Electives	
Area Electives	
Free Electives	

BIOXXX Courses that may be taken by alternative tracks
 BIOXXX Highly recommended courses for students in all tracks