



2026-2027 Academic Year
List of Courses Offered in Foreign Language
2026-2027 Akademik Yılı
Yabancı Dilde Açılacak Dersler Listesi

Institute of Natural and Applied Sciences
Fen Bilimleri Enstitüsü

	Department <i>Bölüm</i>	Course Code <i>Ders Kodu</i>	ECTS <i>AKTS</i>	Course Title <i>Dersin Adı</i>	Semester <i>Dönem</i>	Course Content <i>Dersin İçeriği</i>	Academic Staff <i>Dersi Veren Öğretim Elemanı</i>	Online Available <i>Çevrimiçi</i>
1	Agricultural Biotechnology- MSc <i>Tarımsal Biyoteknoloji</i>	TBI5001	8	MOLECULAR BIOLOGY AND GENETICS	Fall	This course will cover the structure and function of nucleic acids and how they control the function of the cells. Gene expression and control will be other main topic of the lecture. Current strategies to manipulate the gene expression will also be covered in the lecture.	Doç.Dr. Aysun ÖZÇELİK	NA
2	Agricultural Biotechnology- MSc <i>Tarımsal Biyoteknoloji</i>	TBI5021	8	QUANTITATIVE PROBLEMS IN BIOCHEMISTRY	Spring	The course of Quantitative Problems in Biochemistry includes Units and Quantities, Solution and Dilution Preparation, Molecular weight calculation, Stoichiometry, Acids, bases and buffers, Biological Molecules, Bioenergetics, Enzymes, Spectrophotometry and other optical methods, DNA and Molecular Biology calculations.	Doç.Dr. Aysun ÖZÇELİK	NA
3	Agricultural Biotechnology <i>Tarımsal Biyoteknoloji</i>	BTB7031	10	Chromatographic Analysis of Biological Molecules	Fall	The content of the "Chromatographic Analysis of Biological Molecules" course consists of topics that aim to teach fundamental and advanced techniques used for the separation, purification, and analysis of biological molecules, ranging from theoretical principles to practical laboratory applications.	Prof. Dr. M. Fatih CENGİZ	NA
4	Agricultural Biotechnology <i>Tarımsal Biyoteknoloji</i>	BTB7032	10	Mass Spectrometric Applications in Biotechnological Analysis	Spring	The aim of this course is to provide the knowledge and skills necessary for determining and interpreting the mass spectra of biotechnologically important compounds and for elucidating their molecular structures.	Prof. Dr. M. Fatih CENGİZ	NA
5	Agricultural Biotechnology- PhD. <i>Tarımsal Biyoteknoloji</i>	BTİ 7008	8	BIOTECHNOLOGY AND PLANT GENETIC ENGINEERING	Spring	The origins, characteristics and agricultural (MAS) applications of molecular marker techniques (classical and sequencing analysis-based). Statistical analyses used to evaluate data obtained with molecular markers markers. Gen ekspresyonu (RT-qPCR). Gen klonlama, gen transformasyonu, gen düzenleme teknikleri.	Doç.Dr. Hatice İKTEN	
6	Agricultural biotechnology/ <i>Tarımsal Biyoteknoloji</i>	BTİ5007	6	Plant Physiology	Fall	This course covers the physiological processes underlying plant growth and development and plant responses to the environment. In addition to particular textbook (Taiz and Zeiger 5th Ed. Plant Physiology), current research articles will be discussed. This course provides information on plant physiological responses that will later be used in plant production and breeding.	Prof.Dr. Songül Sever Mutlu	no