



2023-2024 Academic Year
List of Courses Offered in Foreign Language
2023-2024 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 <i>Tarımsal Biyoteknoloji</i>	TBİ5002	6	ADVANCED CELLULAR BIOLOGY	Spring Bahar	Cellular structure and organelles, extracellular structures, cell membrane and transport across membranes, membrane lipids and proteins, microscopy, intracellular trafficking, cell signalling mechanisms.	Assoc. Prof. Münevver AKSOY	
2	Agricultural Biotechnology <i>Tarımsal Biyoteknoloji</i>	BTİ7024	8	ALGAL BIOTECHNOLOGY	Spring Bahar	Phylogeny, habitats, growth cycles of algae; photosynthesis; genetic engineering of algae; biosynthetic pathways of algal products such as beta-carotene and astaxanthin; indoor and outdoor growth of algae and bioreactors; algae as renewable energy source; bio-fertilizers; heterologous protein expression in algae; use of algae in sewage treatment etc.will be covered.	Assoc. Prof. Münevver AKSOY	
3	Agricultural Biotechnology <i>Tarımsal Biyoteknoloji</i>	TBİ5014	6	CONSERVATION GENETICS IN ANIMALS	Spring Bahar	Introduction to Animal Genetic Conservation 1.1 Understanding Genetic Diversity 1.1.1 Importance of Genetic Diversity in Animal Populations 1.1.2 Threats to Genetic Diversity 1.2 Historical Overview of Animal Genetic Conservation 1.2.1 Early Conservation Efforts 1.2.2 Milestones in Animal Genetic Conservation 1.3 Scope and Significance of Animal Genetic Conservation 1.3.1 Conservation of Domesticated vs. Wild Species 1.3.2 Implications for Sustainable Agriculture and Biodiversity	Assoc. Prof. Demir ÖZDEMİR	
4	Agricultural Biotechnology <i>Tarımsal Biyoteknoloji</i>	TBİ5016	6	SCIENTIFIC RESEARCH METHODS AND ETHICS II	Spring Bahar	1.1 Definition and Purpose of Scientific Research 1.1.1 Characteristics of Scientific Inquiry 1.1.2 Importance of Research in Advancing Knowledge 1.2 Types of Scientific Research 1.2.1 Exploratory, Descriptive, and Explanatory Research 1.2.2 Quantitative vs. Qualitative Research 1.3 Research Process Overview 1.3.1 Problem Formulation 1.3.2 Literature Review 1.3.3 Hypothesis Development 1.3.4 Data Collection 1.3.5 Data Analysis 1.3.6 Interpretation of Results 1.3.7 Reporting and Publication	Assoc. Prof. Demir ÖZDEMİR	
5	Agricultural Biotechnology <i>Tarımsal Biyoteknoloji</i>	BTİ7014	8	SEED BIOTECHNOLOGY	Spring Bahar	This course will aim to give theoretical and practical information to Master of Science students about the basic aspects of seed physiology such as seed formation, growth and development, seed structure, seed dormancy, seed germination, chemistry of seeds, viability, vigor, longevity, seed storage, aging and deterioration, enhancement and priming, handling, testing, seed pathology and R&D aspects of seeds.	Prof. Dr. Faik KANTAR	Yes