

DESCRIPTION FORM OF COURSE

Course Code and Name: AIT101 Atatürk's First and Revolution History-I				Program: Organic Farming			
Semester	Theory	Prac.	Total	Credits	ECTS	Language of Course	Course Type Compulsory/Elective
Fall Semester	2	0	2	2	2	Turkish	Compulsory
Prerequisites of Course		There are no prerequisites.					
Course Instructor							
Aims of Course		It aims to let the student who attends the courses to acquire the ability of classification, description, explanation, analysis of the current social and individual problems in Turkey by taking rationality and science, norms of modernity into account with respect to the Kemalist thought and the Turkish Revolution					
Course Learning Outcomes and Competencies		1. Have knowledge about the developments in European History, and Ottoman modernization 2. Have knowledge about the causes of the Collapse of the Ottoman Empire 3. Have knowledge about the First World War 4. Have knowledge about the Turkish National Struggle 5. Have knowledge about the founding philosophy of the Republic of Turkey.					
Textbooks and /or Other Required Materials		Images/visuals, slides, videos and lecture notes on the course content.					
Method of delivery of the course		Online					
Teaching Methods and Techniques		Explanation, Question-Answer					

Evaluation Criteria		If yes, please mark (X)	Percentage (%) Contribution to the Overall Average
	1. Midterm Exam	X	40
	2. Midterm Exam		
	3. Midterm Exam		
	Oral Exam		
	Practical Exam (Lab, Project etc.)		

	Semester Final Exam	X	60
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Semester Course Plan	
Week	Syllabus
1	Concepts Related to the Revolution
2	Developments in European history, and their impact on the Ottoman Empire
3	19th century reform movements in the Ottoman Empire (Tanzimat period, the First Constitutional Period)
4	The second constitutional era,trends and movement in Turkish Political thought,the Turco-Italian war 1911),the Balkan Wars(1912-1913)
5	World War I and the Ottoman Empire (outbreak of the war, participation of the Ottoman Empire, the fronts, and the end of the war), the signing of the Mondros Armistice
6	Invasions and reactions against them, Kuva-yı Milliye, Societies (national, associations hostile to the national presence, and societies of the minorities), the difficulties after the armistice, Mustafa Kemal Pasha's activities and arrival in Anatolia.
7	The mudros armistice,Turkish national struggle preparations organization
8	Midterm
9	The beginnings of the national struggle through organization of Congresses (Amasya Circular, Erzurum, Sivas and Western Anatolian Congresses,).
10	Amasya interview, the arrival of the Representatives in Ankara, the last Ottoman Parliament, the adoption of the National Pact, the invasion of Istanbul
11	The opening of the Grand National Assembly of Turkey, the Assembly's structure, its activities and laws, domestic and foreign reactions to the opening of Parliament.
12	Dissolution of the national forces, and founding of the regular army, the Greek general attack, and wars in the Western Front
13	Mustafa Kemal Pasha's supreme military command, Tekâlif-i Milliye orders, Sakarya War and foreign policy developments in its aftermath (Turkish-Russian, Turkish-Afghan relations, the London Conference, Ankara Agreement)
14	The Great Offensive, and signing of the Mudanya Armistice, the developments before the Lausanne Conference, the conference and the signing of the peace agreement
15	Final exam

DESCRIPTION FORM OF COURSE

Course Code and Name: AIT102 Atatürk's First and Revolution History-II

Program: Organic Farming

Semester	Theory	Prac.	Total	Credits	ECTS	Language of Course	Course Type Compulsory/Elective
Spring	2	0	2	2	2	Türkisch	Compulsory

Prerequisites of Course There are no prerequisites.

Course Instructor

Aims of Course Understanding the Turkish National Struggle and Atatürk's Principles and Revolutions

Course Learning Outcomes and Competencies

1. Have knowledge about Ataturk's reforms
2. Have knowledge about the Turkish Foreign Policy in Ataturk's period
3. Have knowledge about Ataturk's principles
4. Have basic level of knowledge about the political developments in Turkey and the world during and after the Second World War.

Textbooks and /or Other Required Materials Images/visuals, slides, videos and lecture notes on the course content.

Method of delivery of the course Online

Teaching Methods and Techniques Explanation, Question-Answer,

Evaluation Criteria		If yes, please mark (X)	Percentage (%) Contribution to the Overall Average
	1. Midterm Exam	X	40
	2. Midterm Exam		
	3. Midterm Exam		
	Oral Exam		
	Practical Exam (Lab, Project etc.)		

	Semester Final Exam	X	60
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Semester Course Plan	
Week	Syllabus
1	Factors as the basis and motives of political modernization: the abolition of the dynasty, The establishment of the Republic, the abolition of the Caliphate. Debates concerning the Dynasty-Caliphate and Republic on the eve of the new state
2	The foundation of the Progressive Republican Party, Sheikh Said Rebellion, declaration of the tranquility law and the attempted assassination of Atatürk.
3	The foundation of the Free Republican Party, The rally of İzmir, closing the party, Menemen and Bursa events.
4	The Constitution of 1924, other constitutions, the developments in the area of law, reforms regarding the regulation of social life and the process of secularization of the Republic of Turkey
5	Reforms related to education and Culture (the Unification of the Education, introduction of the Latin letters, National Schools, establishment of Turkish history and Turkish Language Institutions and their activities, Turkish history thesis, the sun-language theory, 1933 university reform, (the People's Houses)
6	Healthcare developments
7	İzmir Economic Congress, economic policies in the first years of the Republic, the World Economic Depression in 1929 and its reflection on the statist economic policy agenda of Turkey, and the I. Five-Year Development Program.T
8	Midterm
9	Kemalist Thought System, its scope and Principles (republicanism, secularism, nationalism, populism, statism, reformism) and threats to those principles.
10	The Atatürk Era and Turkish Foreign Policy in the Interwar Period I (1923-1930): Turkey's bilateral relations with the European states following the Lausanne Treaty
11	Turkish Foreign Policy in the Interwar Period II (1930-1938)
12	II. World war
13	The second World war and Turkey
14	Developments in the second world war
15	Final exam

DESCRIPTION FORM OF COURSE

Course Code and Name: TTO401 Marketing of Organic Products				Program: Organic Farming			
Semester	Theory	Prac.	Total	Credits	ECTS	Language of Course	Course Type Compulsory/Elective
Spring Semester	3		3	3	4	Türkish	Compulsory
Prerequisites of Course		There are no prerequisites.					
Course Instructor		Assoc. Prof. Dr. Mikail Açar		E-mail : mikailacar@munzur.edu.tr Web : https://www.munzur.edu.tr/birimler/akademik/myo/tmyo/bolumler/bitkisel/Pages/akadro.aspx			
Aims of Course		The aim of this course is to teach the basic concepts, processes and strategies related to marketing organic products; to analyze the differences of organic products from conventional products, the determination of target markets, consumer preferences, branding and labeling practices; and to understand important issues such as sustainability, quality assurance and legal regulations in the organic product market.					
Course Learning Outcomes and Competencies		1- Explains the marketing processes and basic concepts of organic products. 2- Can evaluate target market analysis and consumer behavior. 3- Understands the branding, labeling and certification processes of organic products. 4- Applies sustainability and quality assurance principles in organic marketing. 5- Can develop strategic marketing plans for the marketing of organic products.					
Textbooks and /or Other Required Materials		Marangoz, M. (2008). Organik ürünlerin pazarlanması. Ekin Kitabevi.					
Method of delivery of the course		Face to face / Hybrid					
Teaching Methods and Techniques		Explanation, question-answer, discussion, practice					

Evaluation Criteria		If yes, please mark (X)	Percentage (%) Contribution to the Overall Average
	1. Midterm Exam	X	40
	2. Midterm Exam		
	3. Midterm Exam		
	Oral Exam		
	Practical Exam (Lab, Project etc.)		
	Semester Final Exam	X	60

Semester Course Plan	
Week	Syllabus
1	Marketing Concept and Introduction to Organic Marketing
2	Definition of Organic Products and Organic Agriculture Market in Turkey
3	Consumer Behavior and Organic Product Demand
4	Marketing Research and Market Segmentation
5	Basic Features of Organic Products and Marketing Opportunities
6	Certification and Legal Regulations in Organic Products
7	Branding and Packaging in Organic Products
8	Midterm Exam
9	Distribution Channels of Organic Products
10	Pricing Strategies in Organic Products
11	Digital and Social Media in Organic Product Marketing
12	Sustainability and Ethical Marketing in Organic Products
13	Consumer Trends and Market Trends in Organic Products
14	Final Exam

COURSE DEFINITION FORM

Course Code and Name: GON101Volunteering Activities				Program: Organic Farming			
Semester	Theory	APPLICATION.	Total	Credits	ECTS	Course Language	Course Type Compulsory/Elective
Fall Semester	1	2	3	2	2	Turkish	Elective
Course Prerequisites		There are no prerequisites.					
Course Instructor		Prof. Dr. Numan YILDIRIM		Email : numanyildirim@munzur.edu.tr Web : https://akademik.yok.gov.tr/AkademikArama/view/viewAuthor.jsp			
Objectives of the Course		The aim is to strengthen the ties between the university and society by using the knowledge, skills and accumulation that students acquire throughout their education life, to ensure the development of human, social, cultural and moral values and skills through some volunteering activities that they will participate and carry out, to increase the visibility and awareness in society on issues that are very sensitive to society such as disabled life, migration and disaster, and thus to enable students to do volunteer work in a volunteering area of their choice for a certain period of time within the scope of a plan to be prepared in advance and to share the results.					
Course Learning Outcomes and Competencies		1. Learn the concept of volunteering and volunteer management. 2. Recognize the concept of civil society and non-governmental organizations 3. Recognize the concept of civil society and non-governmental organizations 4. Gain knowledge and skills about volunteering and volunteer management in non-governmental organizations. 5. Learn the basic areas of volunteering 6. Understands the importance of community service practices 7. Can produce projects to find solutions to current problems of society. 8. Gains experience in Social Responsibility and Social Entrepreneurship					
Textbooks and/or Other Required Materials		Current reports from international and national organizations Lecture Notes					
Course presentation format		Face to face, Online					
Teaching Methods and Techniques		Explanation, presentation, group work, field work					

		If yes, please mark (X).	Percentage (%) Contribution to the Overall Average
	1. Midterm Exam	X	40
	2. Midterm Exam		

Evaluation Criteria	3. Midterm Exam		
	Oral examination		
	Applied Exam (Laboratory, Project, etc.)	X	60
	Final Exam		

Term Lesson Plan	
Week	Curriculum
1	Management and Organization Concepts
2	The Concept of Volunteering and Volunteer Management
3	The Concept of Civil Society and Non-Governmental Organizations (NGOs)
4	State and Civil Society in Türkiye
5	Volunteering in Civil Society Organizations, Volunteer Management
6	Main areas of volunteering (Afad, Environment, Education, Culture, Sports, Health, Social Services)
7	Main areas of volunteering (Afad, Environment, Education, Culture, Sports, Health, Social Services)
8	Midterm Exam
9	The importance of community service practices
10	Identifying current problems of society and producing projects that will provide solutions
11	Identifying current problems of society and producing projects that will provide solutions
12	Social Responsibility and Social Entrepreneurship
13	Application Examples
14	Evaluation of Produced Projects

DESCRIPTION FORM OF COURSE

Course Code and Name: LTP220 Entrepreneurship				Program: Organic Farming			
Semester	Theory	Prac.	Total	Credits	ECTS	Language of Course	Course Type Compulsory/Elective
Spring	2	0	2	2	2	Türkisch	Elective
Prerequisites of Course		There are no prerequisites.					
Course Instructor							
Aims of Course		It is the training of entrepreneurial individuals by developing their conceptual and application skills in entrepreneurship and innovation.					
Course Learning Outcomes and Competencies		1.Knows the meaning and importance of entrepreneurship. 2.Develops their entrepreneurship and innovation comprehension skills. 3.Gains skills to evaluate their talents in terms of entrepreneurship by having innovative approaches. 4.Gains the ability to develop creative and innovative approaches to business problems.					
Textbooks and /or Other Required Materials		- Entrepreneurship, Orhan Küçük, Seçkin Publications, Ankara, 2013. -Innovation and Entrepreneurship , P.Drucker, First Harper Ltd, 1985 -Lecture Notes					
Method of delivery of the course		Face to face, Online					
Teaching Methods and Techniques		Explanation, presentation, group work, Preparing a business plan					

Evaluation Criteria		If yes, please mark (X)	Percentage (%) Contribution to the Overall Average
	1. Midterm Exam	X	40
	2. Midterm Exam		
	3. Midterm Exam		
	Oral Exam		
	Practical Exam (Lab, Project etc.)	X	60

	Semester Final Exam		
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Semester Course Plan	
Week	Syllabus
1	Entrepreneurship in practice and general characteristics of entrepreneurs
2	Creativity and innovation concepts and applications
3	Innovation models
4	Innovative business ideas and applications
5	Business Plan scope and content for new ventures
6	Production, Marketing and Financial Planning in Entrepreneurship
7	Strategic planning applications for new ventures
8	Midterm Exam
9	Marketing plan applications for new ventures
10	Production planning applications for new ventures
11	Financial planning for new ventures
12	Intellectual asset management
13	Writing and presentation of business plans
14	Writing and presentation of business plans

DESCRIPTION FORM OF COURSE

Course Code and Name: ORG111 Botany				Program: Organic Farming			
Semester	Theory	Prac.	Total	Credits	ECTS	Language of Course	Course Type Compulsory/Elective
Spring Semester	2	0	2	2	2	Turkish	Elective
Prerequisites of Course		There are no prerequisites.					
Course Instructor		Assoc. Prof. Dr. Mikail Açar		E-mail : mikailacar@munzur.edu.tr Web : https://www.munzur.edu.tr/birimler/akademik/myo/tmyo/bolumler/bitkisel/Pages/akadro.aspx			
Aims of Course		The aim of this course is to enable students to understand the structure, development, classification and interrelationships of plants based on scientific principles; to provide basic information about plant cells, tissues, organs, reproduction methods and systematic groups; and to provide the ability to evaluate the relationships of plants with environmental factors and their ecological roles.					
Course Learning Outcomes and Competencies		1- Explains the structure and functions of plant cells, tissues and organs. 2- Obtains basic information about the classification and morphological characteristics of plants. 3- Understands the plant life cycle, reproduction and development processes. 4- Evaluates the reactions of plants to environmental conditions. 5- Gains the ability to apply botanical knowledge in the fields of agriculture, environment and nature protection.					
Textbooks and /or Other Required Materials		Mauseth, J. D. (2014). Botany: an introduction to plant biology. Jones & Bartlett Publishers.					
Method of delivery of the course		Face to face / Hybrid					
Teaching Methods and Techniques		Explanation, question-answer, discussion, practice					

Evaluation Criteria		If yes, please mark (X)	Percentage (%) Contribution to the Overall Average
	1. Midterm Exam	X	40
	2. Midterm Exam		
	3. Midterm Exam		
	Oral Exam		
	Practical Exam (Lab, Project etc.)		
	Semester Final Exam	X	60

Semester Course Plan	
Week	Syllabus
1	Introduction and Plant Cell
2	Plant Tissues and Meristems
3	Root Morphology and Anatomy
4	Stem Morphology and Anatomy
5	Leaf Morphology and Anatomy
6	Flower Morphology and Reproductive Organs
7	Seed and Fruit Morphology
8	Midterm Exam
9	Introduction to Plant Systematics
10	Plant Taxonomy and Classification Methods
11	Major Plant Groups: Algae, Bryophyta, Pteridophyta
12	Major Plant Groups: Gymnosperms and Angiosperms
13	Plant Ecology: Habitat, Population and Communities
14	Final Exam

DESCRIPTION FORM OF COURSE

Course Code and Name: ORG 222 Plant Physiology				Program: Organic Farming			
Semester	Theory	Prac.	Total	Credits	ECTS	Language of Course	Course Type Compulsory/Elective
Spring Semester	2	2	4	3	5	Turkish	Compulsory
Prerequisites of Course		There are no prerequisites.					
Course Instructor		Assoc. Prof. Dr. Mikail Açar		E-mail : mikailacar@munzur.edu.tr Web : https://www.munzur.edu.tr/birimler/akademik/myo/tmyo/bolumler/bitkisel/Pages/akadro.aspx			
Aims of Course		The aim of this course is to provide a physiological understanding of the life processes of plants; to explain basic physiological events such as water and mineral intake, photosynthesis, respiration, growth and development, the effects of hormones, and plant responses to environmental stress factors; to enable students to understand the functioning mechanisms of plants and to apply this information in areas such as agriculture, plant breeding and biotechnology.					
Course Learning Outcomes and Competencies		1- Explains the physiological processes of plants, namely photosynthesis, respiration and water intake. 2- Recognizes the functions of plant hormones and growth regulators. 3- Evaluates the physiological responses of plants to environmental stress factors. 4- Understands the metabolic activities and energy transformations of plants. 5- Apply plant physiology knowledge in the fields of agriculture and biotechnology.					
Textbooks and /or Other Required Materials		Kaya, A., Akbulut, G. B., & Murathan, Z. T. Meslek Yüksekokulları İçin Bitki Fizyolojisi. Nobel Akademik Yayıncılık.					
Method of delivery of the course		Face to face / Hybrid					
Teaching Methods and Techniques		Explanation, question-answer, discussion, practice					

Evaluation Criteria		If yes, please mark (X)	Percentage (%) Contribution to the Overall Average
	1. Midterm Exam	X	40
	2. Midterm Exam		
	3. Midterm Exam		
	Oral Exam		
	Practical Exam (Lab, Project etc.)		
	Semester Final Exam	X	60

Semester Course Plan	
Week	Syllabus
1	Plant Cell and Chemical Composition
2	Water and Cell
3	Plant-Soil-Water Relations
4	Water Loss in Plants
5	Enzymes
6	Nitrogen Metabolism
7	Photosynthesis
8	Midterm Exam
9	Respiration
10	Growth and Development in Plants
11	Plant Movement Physiology
12	Plant Hormones and Their Functions
13	Field Studies in the Application Area
14	Final Exam

DESCRIPTION FORM OF COURSE

Course Code and Name: TTO 170 Food Biology				Program: Organic Farming			
Semester	Theory	Prac.	Total	Credits	ECTS	Language of Course	Course Type Compulsory/Elective
Fall Semester	3	0	3	3	3	Turkish	Compulsory
Prerequisites of Course		There are no prerequisites.					
Course Instructor		Prof. Dr. Rahmi AYDIN		Mail : raydin@munzur.edu.tr Web : https://scholar.google.com/citations?hl=tr&user=RIVWw4MAAAAJ			
Aims of Course		Biomolecules and living things. Cell and its properties. Properties of living things (organization, metabolism, morphology, etc.). Energy transformations in living things. Providing information on the properties of plant and animal living things as food.					
Course Learning Outcomes and Competencies		1. To be able to learn about the definition of biomolecules and the formation of living things. 2. To understand basic information about cell organization, types and cell proliferation. 3. To gain the ability to understand substance transport and synthesis events in cells. 4. To learn basic information about energy transformations (photosynthesis, respiration) and other biological cycles in living things. 5. To understand basic information about plant tissues and their properties. 6. To understand basic information about animal tissues and their properties. 7. To understand the potential of plant and animal tissues to be used as a food source. 8. To gain basic information about the formation and functions of plant and animal organs. 9. To learn basic properties of biological materials as a food source. .					
Textbooks and /or Other Required Materials		Soil Analysis, Burhan Kaçar, Expanded 2nd Edition , Nobel Publications, Ankara, 2009					
Method of delivery of the course		Face to face,					
Teaching Methods and Techniques		Explanation, question-answer, presentation, practice, analysis					

		If yes, please mark (X)	Percentage (%) Contribution to the Overall Average
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Evaluation Criteria	1. Midterm Exam	X	40
	2. Midterm Exam		
	3. Midterm Exam		
	Oral Exam		
	Practical Exam (Lab, Project etc.)		
	Semester Final Exam	X	60

Semester Course Plan	
Week	Syllabus
1	The concept of living being, the characteristics that determine living beings
2	Biomolecules and their characteristics
3	Cell and cell molecular organization
4	Cell division and their characteristics
5	Transportation of matter in the cell
6	Photosynthesis and chemosynthesis mechanism
7	Aerobic and anaerobic respiration mechanism
8	Plant tissues and their characteristics
9	Midterm exam
10	Plant organs and their characteristics
11	Animal tissues and their characteristics
12	Muscle tissue and its characteristics
13	Carbon dioxide cycle in nature
14	Nitrogen cycle in nature
15	Final Exam

DESCRIPTION FORM OF COURSE

Course Code and Name: TTO 205 Ecology

Program: **Organic Farming Programme**

Semester	Theory	Prac.	Total	Credits	ECTS	Language of Course	Course Type Compulsory/Elective
Fall Semester	4	0	4	4	4	Turkish	Compulsory

Prerequisites of Course

There are no prerequisites.

Course Instructor

Prof. Dr. Rahmi AYDIN

Mail : raydin@munzur.edu.tr

Web :

<https://scholar.google.com/citations?hl=tr&user=RIVWw4MAAAAJ>

Aims of Course

The aim is to teach the concepts and theories of ecology (habitat, etc.) sustainable agricultural ecology to ensure the preservation of natural ecosystems, agroeco systems, teaching to reveal the differences between environmental factors (climate, edaphic factors, biological and topographic factors).

Course Learning Outcomes and Competencies

- Will be able to define the basic rules and concepts of ecology.
1. Defines individual ecology, population ecology, community ecology and ecosystem ecology.
 2. Defines the concepts of environment, environment, biome, biosphere, ecosphere, ecological relationships and factors and homeostasis.
 3. Classifies living things according to their tolerance to ecological factors.
- Will be able to define the application areas of ecology, which forms the basis of environmental sciences.
1. Defines the application areas of ecology in the world ecosystem.
 2. Establishes a relationship with organisms by defining application areas on environmental pollution.
 3. Plans and implements projects by researching studies in applied ecology fields
- Will be able to classify the sub-branches of ecology and define the details related to them.
- Will define all biotic and abiotic factors related to individual, population, community and ecosystem ecology, which constitute the basic sub-branches of ecology, and their relationships with each other.
 - Will be able to define ecosystems and material cycles.

	• Will learn and apply the studies of the branch of ecology, will recognize ecosystems by seeing them and will meet those who are engaged in this branch of science through technical trips and see their work areas, will learn that their service purpose is nature and living things when they become environmental engineers and will plan how they will contribute to the world ecosystem with continuous studies towards this. • Will be able to define the major ecosystems of Turkey and the world. 1. Will define terrestrial ecosystems. 2. Will define freshwater ecosystems. 3. Will define marine ecosystems. 4. Will define wetlands and their importance.
Textbooks and /or Other Required Materials	Soil Analysis, Burhan Kaçar, Expanded 2nd Edition , Nobel Publications, Ankara, 2009
Method of delivery of the course	Face to face
Teaching Methods and Techniques	Explanation, question-answer, presentation, practice, analysis

Evaluation Criteria		If yes, please mark (X)	Percentage (%) Contribution to the Overall Average
	1. Midterm Exam	X	40
	2. Midterm Exam		
	3. Midterm Exam		
	Oral Exam		
	Practical Exam (Lab, Project etc.)		
	Semester Final Exam	X	60

Semester Course Plan	
Week	Syllabus

1	Basic rules and concepts in ecology
2	Individual ecology, abiotic factors and their effects on organisms
3	Edaphic factors, Biological Relations
4	Population Ecology, Definitions and Structural characteristics of the population
5	Quantitative changes, Population dynamics, Species community ecology, Community and its characteristics, succession
6	Quantitative changes, Population dynamics, Species community ecology, Community and its characteristics, succession
7	Ecosystem and its characteristics
8	Material cycles in ecosystems
9	Material cycles in ecosystems
10	Major Ecosystems of the World
11	Major Ecosystems of the World
12	Major Ecosystems of the World
13	Applied Ecology, Environmental Pollution
14	Ecological Balance
15	General Exam

DESCRIPTION FORM OF COURSE

Course Code and Name: TTO 309 Collection from Nature, Medicinal and Aromatic Plants				Program: Organic Farming			
Semester	Theory	Prac.	Total	Credits	ECTS	Language of Course	Course Type Compulsory/Elective
Spring Semester	2	2	4	3	4	Turkish	Compulsory
Prerequisites of Course		There are no prerequisites.					
Course Instructor		Assoc. Prof. Dr. Mikail Açar		E-mail : mikailacar@munzur.edu.tr Web : https://www.munzur.edu.tr/birimler/akademik/myo/tmyo/bolumler/bitkisel/Pages/akadro.aspx			
Aims of Course		The aim of this course is to provide basic knowledge and skills on the identification of medicinal and aromatic plants, their sustainable collection, protection and evaluation in their natural distribution areas. It is also aimed to raise awareness about the ethnobotanical importance of these plants, their pharmaceutical and cosmetic use potential, drying and storage techniques, as well as the legal and ethical rules to be considered during the collection process from nature.					
Course Learning Outcomes and Competencies		1- Recognizes the basic characteristics and classification of medicinal and aromatic plants. 2- Explains the methods of collection from nature and principles of sustainability. 3- Knows the drying, storage and processing techniques of medicinal and aromatic plants. 4- Evaluates the ethnobotanical and economic importance of plants. 5- Acts in accordance with legal and ethical rules in the processes of collection from nature.					
Textbooks and /or Other Required Materials		Baydar, H. (2022). Tıbbi ve aromatik bitkiler bilimi ve teknolojisi. Nobel Akademik Yayıncılık.					
Method of delivery of the course		Face to face / Hybrid					
Teaching Methods and Techniques		Explanation, question-answer, discussion, practice					

Evaluation Criteria		If yes, please mark (X)	Percentage (%) Contribution to the Overall Average
	1. Midterm Exam	X	40
	2. Midterm Exam		
	3. Midterm Exam		
	Oral Exam		
	Practical Exam (Lab, Project etc.)		
	Semester Final Exam	X	60

Semester Course Plan	
Week	Syllabus
1	Introduction to Medicinal and Aromatic Plants
2	Botanical Characteristics of Medicinal and Aromatic Plants
3	Natural Collection Methods and Principles
4	Active Compounds and Chemical Composition in Medicinal Plants
5	Aromatic Plants and Essential Oils
6	Drying, Storage and Processing Techniques
7	Economic and Ethnobotanical Importance of Medicinal and Aromatic Plants
8	Midterm Exam
9	Natural Collection Permits and Legal Regulations
10	Plant Populations and Sustainability
11	Diseases and Pests in Medicinal and Aromatic Plants
12	Natural Collection and Quality Control
13	New Technologies and Research in Medicinal and Aromatic Plants
14	Final Exam

DESCRIPTION FORM OF COURSE

Course Code and Name: TTO 405 General Principles of Organic Agriculture, Control and Certification				Program: <u>Organic Farming Programme</u>			
Semester	Theory	Prac.	Total	Credits	ECTS	Language of Course	Course Type Compulsory/Elective
Fall Semester	2	0	2	2	4	Turkish	Compulsory
Prerequisites of Course		There are no prerequisites.					
Course Instructor		Prof. Dr. Rahmi AYDIN		Mail : raydin@munzur.edu.tr Web : https://scholar.google.com/citations?hl=tr&user=RIVWw4MAAAAJ			
Aims of Course		Organic farming; agricultural production is carried out with control and certification at every stage from production to consumption, without using chemical inputs.					
Course Learning Outcomes and Competencies		1. In agricultural enterprises that perform ecological production, production should be carried out using natural raw materials. 2. All kinds of environmentally threatening effects of raw materials and other business inputs should be reduced or completely avoided. For example, seedlings, saplings, etc. to be used in organic agriculture should be free of pesticides. 3. In order to process the soil and continue the living activity in it, rotational planting and organic fertilization should be done. For this, compost and green manure consisting of farm manure and organic waste should be used. In addition, appropriate soil processing tools should be used and excessive soil processing should be avoided. 4. Balanced mixtures suitable for the ecological environment should be made and emphasis should be given to legumes in rotational planting. 5. In the selection of plant species and varieties, the ecological conditions of the place where production will be made should be taken into consideration					

and resistant seeds, saplings and animals suitable for these conditions should be used.

6. Biological methods should be used to combat pests.

7. In animal production, barns and stables should be in accordance with the rules, nutritional needs should be met by the farm as much as possible, and chemical substances (antibiotics, weight gain additives, etc.) should not be added to feed.

8. In breeding, 1 head of cattle should be considered for 1 ha of land to meet feed needs.

9. In ecological agriculture, producing sufficient amounts of high quality food should come before maximum yield.

10. Natural energy sources such as solar energy and wind energy should be preferred as much as possible for energy.

11. The earnings and opportunities of ecological agriculture enterprises should satisfy the producer and their employees.

Textbooks and /or Other Required Materials	Ministry of Agriculture and Forestry Lecture notes and related books
Method of delivery of the course	Face to face
Teaching Methods and Techniques	Explanation, question-answer, presentation, practice, analysis

		If yes, please mark (X)	Percentage (%) Contribution to the Overall Average
	1. Midterm Exam	X	40
	2. Midterm Exam		

Evaluation Criteria	3. Midterm Exam		
	Oral Exam		
	Practical Exam (Lab, Project etc.)		
	Semester Final Exam	X	60

Semester Course Plan	
Week	Syllabus
1	What is organic farming
2	Why should we consume organic farming products
3	What should we pay attention to when choosing organic farming land
4	What are the pest control methods in organic farming
5	What is a GMO water modified product
6	Seedling
7	Seed
8	Production techniques with cuttings
9	What is a certificate and how to get it
10	What is crop rotation
11	Reducing soil erosion
12	The harms of pesticides
13	The effects of pesticides on non-target organisms
14	Plant disease control techniques
15	General Exam

DESCRIPTION FORM OF COURSE

Course Code and Name: TTO101 Organic Animal Production-I				Program: Organic Farming			
Semester	Theory	Prac.	Total	Credits	ECTS	Language of Course	Course Type Compulsory/Elective
Spring Semester	2	2	4	3	6	Turkish	Compulsory
Prerequisites of Course		There are no prerequisites.					
Course Instructor		Assoc. Prof. Dr. Mikail Açar		E-mail : mikailacar@munzur.edu.tr Web : https://www.munzur.edu.tr/birimler/akademik/myo/tmyo/bolumler/bitkisel/Pages/akadro.aspx			
Aims of Course		The aim of this course is to enable students to comprehend the basic principles, philosophy and application principles of animal production within the organic farming system. The course aims to provide a holistic perspective at an introductory level to organic animal production by addressing issues such as the differences between conventional and organic animal husbandry systems, animal welfare, shelter and environmental conditions, natural feeding and breeding methods and health management. It is also aimed to enable students to reach the competence to evaluate organic animal production in terms of ethical, environmental and legal dimensions.					
Course Learning Outcomes and Competencies		1- Explains the basic concepts and principles of organic animal production. 2- Analyzes the role of animal husbandry in the organic farming system. 3- Defines animal welfare, shelter conditions and environmental requirements in organic animal production. 4- Gains basic knowledge on feeding, reproduction and health management in organic animal production. 5- Understands the ethical, legal and environmental responsibilities related to organic animal production.					
Textbooks and /or Other Required Materials		Er, C., & Başalma, D. (2008). Organik tarımdaki gelişmeler. Nobel Yayın Dağıtım, 1354. Organik Hayvancılık" : Prof. Dr. Yusuf Erdoğan ve Prof. Dr. Muammer Öztürk					
Method of delivery of the course		Face to face / Hybrid					
Teaching Methods and Techniques		Explanation, question-answer, discussion, practice					

Evaluation Criteria		If yes, please mark (X)	Percentage (%) Contribution to the Overall Average
	1. Midterm Exam	X	40
	2. Midterm Exam		
	3. Midterm Exam		
	Oral Exam		
	Practical Exam (Lab, Project etc.)		
	Semester Final Exam	X	60

Semester Course Plan	
Week	Syllabus
1	Introduction to Organic Agriculture and Animal Production
2	The Place and Importance of Animal Husbandry in Organic Agriculture
3	Comparison of Conventional and Organic Animal Production Systems
4	Animal Welfare Principles in Organic Animal Production
5	Shelter and Environmental Conditions in Organic Animal Production
6	Animal Breeds and Genetic Resources in Organic Production
7	Reproduction and Natural Methods in Organic Animal Production
8	Midterm Exam
9	Hygiene and Health Management in Organic Animal Production: Introduction
10	Social Behavior of Animals in Organic Animal Production
11	Natural Pasture-Based Feeding in Organic Animal Production
12	Manure Management and Environmental Effects in Organic Animal Production
13	Ethical and Legal Approaches in Organic Animal Production
14	Final Exam

DESCRIPTION FORM OF COURSE

Course Code and Name: TTO109 Food Chemistry and Biochemistry				Program: Organic Farming			
Semester	Theory	APPLICATION.	Total	Credits	ECTS	Course Language	Course Type Compulsory/Elective
Fall Semester	3	0	3	3	4	Turkish	Compulsory
Course Prerequisites		There are no prerequisites.					
Course Instructor		Prof. Dr. Numan YILDIRIM		Email : numanyildirim@munzur.edu.tr Web : https://akademik.yok.gov.tr/AkademikArama/view/viewAuthor.jsp			
Objectives of the Course		In Food Science and Technology, basic information is given about the structure and properties of biomolecules, proteins, carbohydrates, fats, vitamins, minerals, citric acid cycle, oxidative phosphorylation, gluconeogenesis, biosynthesis of macromolecules, metabolic energy production and storage, glycolysis and major biochemical changes in food.					
Course Learning Outcomes and Competencies		1. To have knowledge about the definition of Food Biochemistry and its application areas. 2. Understanding the conditions of biochemical reactions occurring in foods 3. Understanding the structure and properties of bio-molecules formed as a result of reactions in foods. 4. Gain knowledge about the structure and properties of proteins. 5. Gain knowledge about the structure and properties of oils. 6. Gain information about the structure and properties of carbohydrates. 7. Gain information about the structure and properties of vitamins and minerals. 8. Understand the formation and breakdown reactions of metabolic compounds.					
Textbooks and/or Other Required Materials		Lecture Notes					
Course presentation format		Face to face, Online					
Teaching Methods and Techniques		Explanation, presentation, group work, field work					

Evaluation Criteria		If yes, please mark (X).	Percentage (%) Contribution to the Overall Average
	1. Midterm Exam	X	40
	2. Midterm Exam		
	3. Midterm Exam		
	Oral examination		

	Applied Exam (Laboratory, Project, etc.)	X	60
	Final Exam		

Term Lesson Plan	
Week	Curriculum
1	The concept of food
2	Food chemistry and food biochemistry concepts
3	Food Ingredients
4	Structural properties of proteins
5	Functions of proteins
6	Structural properties of carbohydrates
7	Functions of carbohydrates
8	Midterm Exam
9	Structural properties of oils
10	Functions of Fats
11	Vitamins and Minerals
12	Vitamins and minerals
13	Metabolic compounds, metabolism
14	Biochemical reactions in foods

DESCRIPTION FORM OF COURSE

Course Code and Name: TTO201 Organic Animal Production-II				Program: Organic Farming			
Semester	Theory	Prac.	Total	Credits	ECTS	Language of Course	Course Type Compulsory/Elective
Spring Semester	2	2	4	3	6	Turkish	Compulsory
Prerequisites of Course		There are no prerequisites.					
Course Instructor		Assoc. Prof. Dr. Mikail Açar		E-mail : mikailacar@munzur.edu.tr Web : https://www.munzur.edu.tr/birimler/akademik/myo/tmyo/bolumler/bitkisel/Pages/akadro.aspx			
Aims of Course		The aim of this course is to provide advanced knowledge about animal health, welfare, shelter conditions, organic feeding methods, production systems and relevant legal regulations in line with the principles of organic animal production; to enable students to acquire the ability to evaluate organic animal husbandry practices within the framework of sustainability, environmental health and ethical production principles.					
Course Learning Outcomes and Competencies		1- Explains the basic principles and applications of organic animal production systems. 2- Recognizes approaches specific to organic production in animal welfare, health and nutrition. 3- Gains the ability to plan organic feeding and shelter conditions. 4- Understands the certification processes and legal regulations of organic animal products. 5- Evaluates organic animal production problems in line with sustainable and ethical production principles and develops solution suggestions.					
Textbooks and /or Other Required Materials		Er, C., & Başalma, D. (2008). Organik tarımdaki gelişmeler. Nobel Yayın Dağıtım, 1354. Organik Hayvancılık" : Prof. Dr. Yusuf Erdoğan ve Prof. Dr. Muammer Öztürk					
Method of delivery of the course		Face to face / Hybrid					
Teaching Methods and Techniques		Explanation, question-answer, discussion, practice					

Evaluation Criteria		If yes, please mark (X)	Percentage (%) Contribution to the Overall Average
	1. Midterm Exam	X	40
	2. Midterm Exam		
	3. Midterm Exam		
	Oral Exam		
	Practical Exam (Lab, Project etc.)		
	Semester Final Exam	X	60

Semester Course Plan	
Week	Syllabus
1	Basic Principles and Philosophy of Organic Agriculture
2	Control and Supervision Mechanisms in Organic Agriculture
3	Basics for Starting Organic Agriculture
4	Fundamentals of Organic Animal Production
5	Management and Planning in Organic Animal Production
6	Organic Beekeeping
7	Organic Aquaculture Production
8	Midterm Exam
9	Organic Poultry: Breeding and Management
10	Organic Egg Production
11	Organic Animal Nutrition and Feed Management
12	Disease Control in Organic Animal Production
13	Sustainability and Economy in Organic Animal Production
14	Final Exam

DESCRIPTION FORM OF COURSE

Course Code and Name: TTO207 Climate Knowledge				Program: Organic Farming			
Semester	Theory	Prac.	Total	Credits	ECTS	Language of Course	Course Type Compulsory/Elective
Spring Semester	2		2	2	2	Turkish	Compulsory
Prerequisites of Course		There are no prerequisites.					
Course Instructor		Assoc. Prof. Dr. Mikail Açar		E-mail : mikailacar@munzur.edu.tr Web : https://www.munzur.edu.tr/birimler/akademik/myo/tmyo/bolumler/bitkisel/Pages/akadro.aspx			
Aims of Course		The aim of this course is to enable students to understand the basic components of the climate system, atmospheric processes and climate types; to provide basic information about the functioning of climate on a global and regional scale; and to raise awareness about climate change, the effects of climate on human life and the environment, and the applications of climate information in areas such as agriculture, ecology and planning..					
Course Learning Outcomes and Competencies		1- Explains the basic components of the climate system and atmospheric processes. 2- Recognizes different climate types and their characteristics. 3- Gains basic knowledge about climate change and its causes. 4- Evaluates the effects of climate on human life and the environment. 5- Can apply climate knowledge in areas such as agriculture, planning and environmental management.					
Textbooks and /or Other Required Materials		Current reports of international and national organizations, Lecture Notes İklim Bilgisi ve Meteoroloji, Yazar: H. Gökmen					
Method of delivery of the course		Face to face / Hybrid					
Teaching Methods and Techniques		Explanation, question-answer, discussion, practice					

Evaluation Criteria		If yes, please mark (X)	Percentage (%) Contribution to the Overall Average
	1. Midterm Exam	X	40
	2. Midterm Exam		
	3. Midterm Exam		
	Oral Exam		
	Practical Exam (Lab, Project etc.)		
	Semester Final Exam	X	60

Semester Course Plan	
Week	Syllabus
1	Definition and General Features of the Atmosphere
2	Heat and Temperature in the Atmosphere
3	Energy Uptake and Energy Transmission Forms in the Atmosphere
4	Plant and Temperature Relationship
5	Frost Event and Effects of Frost on Plants
6	Air Moisture Content and Humidity Measurement Techniques
7	Evaporation and Condensation Events in the Atmosphere
8	Midterm Exam
9	Atmospheric Pressure and Wind
10	Types of Clouds and Precipitation
11	Climate Types and Classifications
12	Microclimate and Effects on Plants
13	Climate Change and Effects on Plant Production
14	Final Exam

DESCRIPTION FORM OF COURSE

Course Code and Name: TTO211 Soil Information				Program: Organic Farming			
Semester	Theory	Prac.	Total	Credits	ECTS	Course Language	Course Type Compulsory/Elective
Spring Term	2	0	2	2	4	Turkish	Compulsory
Course Prerequisites		There are no prerequisites.					
Course Instructor		Prof. Dr. Numan YILDIRIM		Email :numanyildirim@munzur.edu.tr Web : https://akademik.yok.gov.tr/AkademikArama/view/viewAuthor.jsp			
Objectives of the Course		The aim of this course is to enable students to recognize soil formation, rocks and minerals found in soil and the elements that form them, to establish relationships between the physical, chemical and biological properties of soil, and to determine which agricultural practices should be implemented to improve soil quality according to soil conditions.					
Course Learning Outcomes and Competencies		1. Define soil formation and its resources 3. Have knowledge about the physical, chemical and biological properties of the soil. 4. Describe soil structure and its fractions. 5. Explains soil color, soil temperature and soil porosity.					
Textbooks and/or Other Required Materials		Lecture Notes					
Course presentation format		Face to face, Online					
Teaching Methods and Techniques		Explanation, presentation, group work, field work					

Evaluation Criteria		If yes, please mark (X).	Percentage (%) Contribution to the Overall Average
	1. Midterm Exam	X	40
	2. Midterm Exam		
	3. Midterm Exam		
	Oral examination		
	Applied Exam (Laboratory, Project,	X	60

	etc.)		
	Final Exam		

Term Lesson Plan	
Week	Curriculum
1	The concept of soil
2	Soil formation
3	Mineral and organic parent materials
4	Factors affecting soil formation
5	Soil chemistry
6	Soil biology
7	Soil structure
8	Midterm Exam
9	Soil fractions
10	Earth color
11	Soil porosity
12	Soil temperature
13	Plant growth chemicals
14	Soil tillage and fertilizers

DESCRIPTION FORM OF COURSE

Course Code and Name: TTO213 Plant Protection				Program: Organic Farming			
Semester	Theory	Prac.	Total	Credits	ECTS	Language of Course	Course Type Compulsory/Elective
Spring Semester	3		3	3	2	Turkish	Compulsory
Prerequisites of Course		There are no prerequisites.					
Course Instructor		Prof. Dr. Mevlüt ALATAŞ		E-posta : mevlutalatas@munzur.edu.tr Web : https://www.munzur.edu.tr/birimler/akademik/myo/tmyo/bolumler/bitkisel/Pages/akadro.aspx			
Aims of Course		To recognize physiological disorders, bacterial, fungal and viral disease symptoms of cultivated plants and to apply methods of combating these diseases.					
Course Learning Outcomes and Competencies		1. Recognizes plant disease agents. 2. Knows the penetration and infection physiology of pathogens. 3. Knows the effects of pathogens on plant physiological functions. 4. Knows the conditions that cause epidemics to occur. 5. Knows the methods of combating plant disease agents and occupational and worker health in combating.					
Textbooks and /or Other Required Materials		Lecture notes of the instructor who taught the course, Kaygısız, H., Diseases in Plant Production. Hasad Publications. Istanbul, 2002. Prof. Dr. Özdemir Alaoğlu, Prof. Dr. Nuh Boyraz, Prof. Dr. Ahmet Güncan, Prof. Dr. Kubilay Kurtuluş Baştaş, Plant Protection, Atlas Academy, 2024 Ankara University, Open Archive Lecture Notes					
Method of delivery of the course		Face to face / Online					
Teaching Methods and Techniques		Explanation, question-answer, discussion, practice					

Evaluation Criteria		If yes, please mark (X)	Percentage (%) Contribution to the Overall Average
	1. Midterm Exam	X	40
	2. Midterm Exam		
	3. Midterm Exam		
	Oral Exam		
	Practical Exam (Lab, Project etc.)		
	Semester Final Exam	X	60

Semester Course Plan	
Week	Syllabus
1	Definition of Plant Protection and Entomological Factors
2	External (Morphological) Structure of Insects
3	Structure and Function of Internal Organs in Insects (Anatomy, Physiology, Reproduction and Development)
4	Insect Ecology
5	Fighting with Insects (Cultural, Biological, Physical, Biotechnological, Chemical)
6	Methods for taking soil samples and preparing them for analysis, drying, grinding, sifting and storing them
7	Insect Taxonomy
8	Midterm
9	Plant Protection Phytopathology
10	Plant Pathogenic Fungi
11	Plant Pathogenic Bacteria
12	Weeds and Flowering Parasitic Plants
13	Hygiene and Therapy (Science of Disease Prevention and Treatment)
14	Abiotic Factors
15	Final exam

DESCRIPTION FORM OF COURSE

Course Code and Name: TTO307 Greenhouse cultivation-I				Program: Organic Farming			
Semester	Theory	Prac.	Total	Credits	ECTS	Language of Course	Course Type Compulsory/Elective
Fall Semester	2	2	4	3	4	Türkish	Compulsory
Prerequisites of Course		There are no prerequisites.					
Course Instructor		Prof. Dr. Mevlüt ALATAŞ		E-posta : mevlutalatas@munzur.edu.tr Web : https://www.munzur.edu.tr/birimler/akademik/myo/tmyo/bolumler/bitkisel/Pages/akadro.aspx			
Aims of Course		To teach the history of greenhouse farming, its place in the world and in Turkey, the classification of greenhouses, ecological and economic factors affecting the selection of greenhouse location, introduction of greenhouse elements, and planning of the greenhouse interior.					
Course Learning Outcomes and Competencies		1. Learns the concepts of greenhouse and greenhouse farming. 2. Knows and analyzes the current status of greenhouse farming in Turkey. 3. Knows and analyzes the current status of greenhouse farming in the world. 4. Knows the techniques and methods of production, cultivation and maintenance in greenhouses. 5. Analyzes where, how and how economically a greenhouse can be established. 6. Increases the yield of products grown in greenhouses. 7. Becomes informed about how its quality can be increased. 8. Learns what to do in the next stage after establishing a greenhouse. 9. Prepares soil in the greenhouse. Performs cultural processes in the greenhouse. 10. Learns soilless agriculture, knows its methods and techniques and gains the qualification to apply it.					
Textbooks and /or Other Required Materials		Lecture notes of the instructor, Sevgican, A., 2002. Ertekin, Ü., 2002. Greenhouse and Covered Cultivation. Mars Press, Ankara. Ankara University open archive lecture notes.					
Method of delivery of the course		Face to face / Online					
Teaching Methods and Techniques		Explanation, question-answer, discussion, practice					

Evaluation Criteria		If yes, please mark (X)	Percentage (%) Contribution to the Overall Average
	1. Midterm Exam	X	40
	2. Midterm Exam		
	3. Midterm Exam		
	Oral Exam		
	Practical Exam (Lab, Project etc.)		
	Semester Final Exam	X	60

Semester Course Plan	
Week	Syllabus
1	Definition of Greenhouse Cultivation, History of Greenhouse Cultivation, Greenhouse Cultivation in the World
2	Greenhouse Cultivation in Turkey
3	Definition of Greenhouse Effect, Greenhouse Structures
4	Greenhouse Structures, Low Plastic Tunnel, High Plastic Tunnel
5	Greenhouse Structures, Greenhouses, General Features, Factors Affecting Greenhouse Type Selection, Classification of Greenhouses
6	Economic and Ecological Factors Affecting Greenhouse Planning
7	Greenhouse Structural Elements
8	Midterm
9	Greenhouse Business Planning
10	Providing Environmental Conditions Suitable for Plant Cultivation in Greenhouses
11	Arrangement of Greenhouse Interiors
12	Plant Cultivation in Greenhouses
13	Plant Cultivation in Greenhouses, Irrigation, Automation, Drainage
14	Plant Cultivation in Greenhouses, Cultural Processes Performed in Greenhouses
15	Final exam

DESCRIPTION FORM OF COURSE

Course Code and Name: TTO311 Genetics				Program: Organic Farming			
Semester	Theory	Prac.	Total	Credits	ECTS	Course Language	Course Type Compulsory/Elective
Fall Semester	4	0	4	4	4	Turkish	Compulsory
Course Prerequisites		There are no prerequisites.					
Course Instructor		Prof. Dr. Numan YILDIRIM		Email : numanyildirim@munzur.edu.tr Web : https://akademik.yok.gov.tr/AkademikArama/view/viewAuthor.jsp			
Objectives of the Course		The aim of this course is to provide students with basic information in the field of genetics along with current applications and examples.					
Course Learning Outcomes and Competencies		1. Define the basic concepts used in genetics and model organisms. 2. Understand the biochemical reaction conditions that occur in foods. 3. Interpret the chromosome theory of inheritance and Mendelian genetics 4. Explain the differences between eukaryotic and prokaryotic genetics. 5. Explain mutations and their mechanisms of action. 6. Know the differences between DNA and RNA 7. Explain how DNA replication occurs 8. Explain how genetically modified organisms are obtained					
Textbooks and/or Other Required Materials		Öner C. (Editor). (2009). Genetic Concepts. Palme Publishing House. Lecture Notes					
Course presentation format		Face to face, Online					
Teaching Methods and Techniques		Explanation, presentation, group work, field work					

Evaluation Criteria		If yes, please mark (X).	Percentage (%) Contribution to the Overall Average
	1. Midterm Exam	X	40
	2. Midterm Exam		
	3. Midterm Exam		
	Oral examination		

	Applied Exam (Laboratory, Project, etc.)	X	60
	Final Exam		

Term Lesson Plan	
Week	Curriculum
1	Concept of gene and genome
2	Differences between eukaryotic and prokaryotic genomes
3	Nucleic acids, DNA
4	History of DNA and DNA models
5	Structure and properties of RNA
6	DNA replication
7	DNA transcription
8	Midterm Exam
9	Mutation
10	DNA repair mechanisms
11	Gene cloning studies
12	Protein synthesis
13	Gene transfer
14	GMO organisms

DESCRIPTION FORM OF COURSE

Course Code and Name: TTO313 Agricultural Mechanisation and Irrigation				Program: Organic Farming			
Semester	Theory	Prac.	Total	Credits	ECTS	Language of Course	Course Type Compulsory/Elective
Fall Semester	2		2	2	3	Turkish	Compulsory
Prerequisites of Course		There are no prerequisites.					
Course Instructor		Prof. Dr. Mevlüt ALATAŞ		E-posta : mevlutalatas@munzur.edu.tr Web : https://www.munzur.edu.tr/birimler/akademik/myo/tmyo/bolumler/bitkisel/Pages/akadro.aspx			
Aims of Course		Definition of agricultural mechanization, its benefits, our country's agricultural mechanization level. To provide information about agricultural tools and machines, tractors, machines included in tools and machines. To understand irrigation methods in agriculture.					
Course Learning Outcomes and Competencies		1. Explains the development and importance of Agricultural Mechanization. 2. Learns the importance and benefits of Agricultural Mechanization in agriculture. 3. Understands the features and privileges of the tools, vehicles and equipment to be used for good agricultural mechanization. 4. Understands the development and importance of agricultural mechanization in the world and in Türkiye. 5. Explains the tools and equipment in Agricultural Mechanization. 6. Learns the tractor and its types. 7. Learns the sowing, planting and fertilizing machines. 8. Learns about plant protection machines and harvesting machines. 9. Explains irrigation methods in agriculture. 10. Understands the importance of water in plant production. 11. Learns the surface irrigation and pressurized irrigation methods in agricultural areas. 12. Understands the importance of agricultural drainage.					
Textbooks and /or Other Required Materials		Lecture notes of the instructor Agricultural Mechanization 1, Çukurova University Publications, 2011 MEB, Agricultural Field Application 9th grade Textbook Gürol Yıldırım, Micro-Irrigation System Lateral Pipe Flow Hydraulics - Analytical Solutions and Design Applications, Nobel Academy Publishing, 2024.					
Method of delivery of the course		Face to face / Online					
Teaching Methods and Techniques		Explanation, question-answer, discussion, practice					

Evaluation Criteria		If yes, please mark (X)	Percentage (%) Contribution to the Overall Average
	1. Midterm Exam	X	40
	2. Midterm Exam		
	3. Midterm Exam		
	Oral Exam		
	Practical Exam (Lab, Project etc.)		
	Semester Final Exam	X	60

Semester Course Plan	
Week	Syllabus
1	Definition of Agricultural Mechanization
2	Development and Importance of Agricultural Mechanization
3	Energy Sources in Agriculture
4	Energy Sources in Agriculture, Tractors
5	Agricultural Tractors and Soil Tillage Mechanization
6	Relationship between Tractor and Soil Tillage Machine
7	Planting Methods
8	Midterm
9	Definition and Importance of Irrigation,
10	Water transmission and distribution structures
11	Importance of Irrigation for Plants and Surface Irrigation Methods
12	Surface Irrigation Methods
13	Pressure Irrigation Methods
14	Pressure Irrigation Methods
15	Final exam

DESCRIPTION FORM OF COURSE

Course Code and Name: TTO323 Biotechnology				Program: Organic Farming			
Semester	Theory	Prac.	Total	Credits	ECTS	Course Language	Course Type Compulsory/Elective
Spring Term	2	0	2	2	3	Turkish	Compulsory
Course Prerequisites		There are no prerequisites.					
Course Instructor		Prof. Dr. Numan YILDIRIM			Email :numanyildirim@munzur.edu.tr Web : https://akademik.yok.gov.tr/AkademikArama/view/viewAuthor.jsp		
Objectives of the Course		This course aims to help students understand what biotechnology means and where it is used. concepts; distinguish between traditional and modern biotechnology It aims to enable them to learn the areas in which biotechnology serves.					
Course Learning Outcomes and Competencies		1. Define biotechnology 2. Give examples of animal biotechnology application areas 3. Gain knowledge about the techniques used in plant biotechnology 4. Define microbial biotechnology 5. Gain knowledge about current applications of biotechnology 6. Define the fields of Environmental and Food Biotechnology and give examples.					
Textbooks and/or Other Required Materials		Lecture Notes					
Course presentation format		Face to face, Online					
Teaching Methods and Techniques		Explanation, presentation, group work, field work					

Evaluation Criteria		If yes, please mark (X).	Percentage (%) Contribution to the Overall Average
	1. Midterm Exam	X	40
	2. Midterm Exam		
	3. Midterm Exam		
	Oral examination		
	Applied Exam (Laboratory, Project,	X	60

	etc.)		
	Final Exam		

Term Lesson Plan	
Week	Curriculum
1	Concept of Biotechnology
2	History of biotechnology
3	Definition and application areas of Food Biotechnology
4	Definition and application areas of Environmental Biotechnology
5	Definition and application areas of Plant Biotechnology
6	Plant tissue culture methods
7	Definition and application areas of Animal Biotechnology
8	Midterm Exam
9	Definition and application areas of Animal Biotechnology
10	Microbial biotechnology
11	Enzyme microbiotechnology
12	Fermentation methods
13	Characteristics of a good industrial microorganism
14	Industrial biotechnology

DESCRIPTION FORM OF COURSE

Course Code and Name: TTO403 Greenhouse cultivation-II				Program: Organic Farming			
Semester	Theory	Prac.	Total	Credits	ECTS	Language of Course	Course Type Compulsory/Elective
Spring Semester	2	2	4	3	4	Türkish	Compulsory
Prerequisites of Course		There are no prerequisites.					
Course Instructor		Prof. Dr. Mevlüt ALATAŞ		E-posta : mevlutalatas@munzur.edu.tr Web : https://www.munzur.edu.tr/birimler/akademik/myo/tmyo/bolumler/bitkisel/Pages/akadro.aspx			
Aims of Course		Practicing greenhouse farming, growing seasonal plant species.					
Course Learning Outcomes and Competencies		1. Understands the place and importance of greenhouse farming in agriculture. 2. Performs seed sowing, seedling planting and maintenance operations in the greenhouse. 3. Grows seasonal plant species (vegetables, fruits and flowers) in the greenhouse.					
Textbooks and /or Other Required Materials		Lecture notes of the instructor, MEB, Greenhouse Cultivation Systems Textbook., K. Savaş, Titiz Modern Greenhouse - Road Map for Investors Ansiad Publishing House, Antalya, 2004					
Method of delivery of the course		Face to face / Online					
Teaching Methods and Techniques		Explanation, question-answer, discussion, practice					

Evaluation Criteria		If yes, please mark (X)	Percentage (%) Contribution to the Overall Average
	1. Midterm Exam	X	40
	2. Midterm Exam		
	3. Midterm Exam		
	Oral Exam		
	Practical Exam (Lab, Project etc.)		
	Semester Final Exam	X	60

Semester Course Plan	
Week	Syllabus
1	The importance of greenhouse farming, its history, its situation in the world and Turkey
2	Soilless Agriculture
3	Greenhouse Tomato Cultivation
4	Greenhouse Pepper Cultivation
5	Greenhouse Cucumber Cultivation
6	Greenhouse Eggplant Cultivation
7	Greenhouse Banana Cultivation
8	Midterm
9	Greenhouse Strawberry Cultivation
10	Greenhouse Melon Cultivation
11	Greenhouse Squash and Cut Flower Cultivation
12	Greenhouse Lettuce Cultivation
13	Greenhouse Onion Cultivation
14	Greenhouse Watermelon and Potted Flower Cultivation
15	Final exam

DESCRIPTION FORM OF COURSE

Course Code and Name: TTO409 Methods of Determination of GMO Products				Program: Organic Farming			
Semester	Theory	Prac.	Total	Credits	ECTS	Course Language	Course Type Compulsory/Elective
Spring Term	4	0	4	4	5	Turkish	Compulsory
Course Prerequisites		There are no prerequisites.					
Course Instructor		Prof. Dr. Numan YILDIRIM			Email : numanyildirim@munzur.edu.tr Web : https://akademik.vok.gov.tr/AkademikArama/view/viewAuthor.jsp		
Objectives of the Course		This course aims to help students understand what Genetically Modified Organisms mean, where they are used, to learn about the effects of GMO products on health, and to teach the methods used to identify GMO products.					
Course Learning Outcomes and Competencies		1. Define GMO 2. Gain information about the techniques used to produce GMO organisms. 3. Knows the effects of GMO products on health and gives examples 4. List the GMO detection methods based on protein 5. Learn about methods for gene identification 6. Can decide which method to use for which type of food					
Textbooks and/or Other Required Materials		Lecture Notes					
Course presentation format		Face to face, Online					
Teaching Methods and Techniques		Explanation, presentation, group work, field work					

Evaluation Criteria		If yes, please mark (X).	Percentage (%) Contribution to the Overall Average
	1. Midterm Exam	X	40
	2. Midterm Exam		
	3. Midterm Exam		
	Oral examination		
	Applied Exam (Laboratory, Project,	X	60

	etc.)		
	Final Exam		

Term Lesson Plan	
Week	Curriculum
1	The Concept of GMO
2	The world market for GMO foods
3	Methods used in the production of GMO products
4	Genetic sources used in GMO production
5	Examples of plants produced with GMO
6	Examples of plants produced with GMO
7	Effects of GMO products on health
8	Midterm Exam
9	Methods for identifying GMO products
10	Gene-based methods
11	Protein-based Methods
12	Laboratory techniques used to identify GMO products
13	Laboratory stages used in determining GMO products
14	Case studies

DESCRIPTION FORM OF COURSE

Course Code and Name: TTO419 Organic Agriculture and Forage Crops				Program: Organic Farming			
Semester	Theory	Prac.	Total	Credits	ECTS	Language of Course	Course Type Compulsory/Elective
Spring Semester	2		2	2	2	Türkish	Elective
Prerequisites of Course		There are no prerequisites.					
Course Instructor		Prof. Dr. Mevlüt ALATAŞ		E-posta : mevlutalatas@munzur.edu.tr Web : https://www.munzur.edu.tr/birimler/akademik/myo/tmyo/bolumler/bitkisel/Pages/akadro.aspx			
Aims of Course		To understand the importance of meadows and pastures, to provide information about meadow and pasture management and improvement, and to provide a general understanding of forage crop cultivation.					
Course Learning Outcomes and Competencies		1. Çayır meraların tanımını ve ekonomik ve diğer önemlerini kavrar. 2. Çayır meraların yönetimi ve ıslahı hakkında bilgi sahibi olur. 3. Çayır ve meralarda yetişen yem bitkilerini tanıır ve yetiştiriciliğini öğrenir.					
Textbooks and /or Other Required Materials		Lecture notes of the instructor, Altın, M.1994. Meadow-Pasture Management. Trakya University, Tekirdağ Faculty of Agriculture. Publication No:222, Textbook No:26, Tekirdağ Gökkuş, A. Koç, 2005. Meadow Pasture Improvement. Republic of Turkey. Ministry of Agriculture and Rural Affairs. Meadow Pasture and Basin Development Department, Ankara TEKELİ A.Ş.,					
Method of delivery of the course		Face to face / Online					
Teaching Methods and Techniques		Explanation, question-answer, discussion, practice					

Evaluation Criteria		If yes, please mark (X)	Percentage (%) Contribution to the Overall Average
	1. Midterm Exam	X	40
	2. Midterm Exam		
	3. Midterm Exam		
	Oral Exam		
	Practical Exam (Lab, Project etc.)		
	Semester Final Exam	X	60

Semester Course Plan	
Week	Syllabus
1	Definition and Classification of Pastures
2	Definition and Scope of Pasture Management
3	Relationships of Pasture Management with Plant Ecology
4	Grazing Systems
5	Pasture Management
6	Graze Forage Crops 1
7	Graze Forage Crops 2
8	Midterm
9	Cereal Forage Crops 3
10	Cereal Forage Crops 4
11	Status of Forage Crops Agriculture and Planting Areas in Turkey,
12	General Morphological Characteristics of Legume Forage Crops
13	Special Legume Forage Crops
14	Special Legume Forage Crops
15	Final exam

COURSE DESCRIPTION FORM

Course Code and Name: TTO413 - Conservation, Packaging, and Transportation

Program: Organic Farming

Semester	Theory	Practice	Total Hours	Credits	AKTS	Course Language:	Course Type Compulsory/Elective
Spring Semester	4	-	4	4	4	Turkish	Compulsory

Course Prerequisites

There are no prerequisites .

Instructor:

Assoc. Prof. Dr. Neslihan TAŞAR

Email : ntasar@munzur.edu.tr

Web :

<https://www.munzur.edu.tr/birimler/akademik/myo/tmyo/bolumler/bitkisel/Pages/akadro.aspx>

Course Objectives

This course aims to provide students with the knowledge and skills related to applying food preservation methods that reduce microbial activity or eliminate microorganisms, within the framework of occupational health and safety and environmental protection. It also covers the effectiveness of packaging in preserving food and the different preservation and packaging techniques used.

Learning Outcomes and Competencies

- 1.The student will be able to evaluate packaging methods for specialty foods and analyze the suitability of different types of packaging materials.
- 2.The student will be able to explain food preservation methods and identify the advantages and limitations of each method.
- 3.The student will acquire basic knowledge about packaging materials such as glass, metal, plastic, and paper, as well as modified atmosphere packaging, transport packaging, and packaging techniques specific to specialty foods.

Course Material

Lecture Notes

Course Delivery

Face-to-face, Online

Teaching Methods and Techniques

- * Explanation
- * Presentation
- * Group Work
- * Field Work

Evaluation Criteria	Assessment Type	If applicable, mark (X)	Percentage (%) Contribution to Overall Grade
	Midterm Exam	X	40
	Final Exam		
	Oral Exam		
	Practical Exam		
	Applied Exam (Laboratory, Project etc.)		
	Final Exam	X	60

Course Weekly Schedule	
Week	Topics
1	Food Spoilage and Preservation
2	Thermal Process Applications
3	Control of Water Activity
4	Addition of Preservatives
5	Controlled and Modified Atmosphere
6	Irradiation
7	New Methods in Food Preservation
8	Midterm Exam
9	Relationship Between Packaging and Food
10	Geographical Indications
11	Glass Packaging
12	Paper and Wooden Packaging
13	Metal and Aluminum Packaging
14	Final Exam

COURSE DESCRIPTION FORM

Course Code and Name: TTO103 - Organic Plant Production

Program: Organic Farming

Semester	Theory	Practice	Total Hours	Credits	AKTS	Course Language:	Course Type Compulsory/Elective
Fall Semester	2	2	4	3	6	Turkish	Compulsory

Course Prerequisites

None .

Instructor:

Assoc. Prof. Dr. Neslihan TAŞAR

Email : ntasar@munzur.edu.tr

Web :

<https://www.munzur.edu.tr/birimler/akademik/myo/tmyo/bolumler/bitkisel/Pages/akadro.aspx>

Course Objectives

This course aims to teach students the importance and role of plant production in the Turkish economy, the definition and classification of plants, and general plant production techniques.

Learning Outcomes and Competencies

- 1.Explains the fundamental principles and historical development of organic agriculture.
- 2.Describes soil preparation, fertilization, sowing/planting, and crop maintenance practices in organic plant production.
- 3.Analyzes the differences between plant nutrients used in organic farming and chemical fertilizers.
- 4.Explains biological and mechanical methods used for pest and disease management in organic production.
- 5.Demonstrates knowledge of organic agriculture legislation and certification procedures.
6. Evaluates the environmental, economic, and social impacts of organic plant production systems.

Course Material

Lecture Notes

Course Delivery

Face-to-face, Online

Teaching Methods and

* Explanation

Techniques	* Presentation * Group Work * Field Work
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Evaluation Criteria	Assessment Type	If applicable, mark (X)	Percentage (%) Contribution to Overall Grade
	Midterm Exam	X	40
	Practical Exam		
	Oral Exam		-
	Final Exam	X	60

Course Weekly Schedule	
Week	Topics
1	Introduction: History of agriculture
2	Basic concepts related to plant production
3	Classification of horticultural crops (fruits, vegetables), economic importance
4	Classification of field crops (cereals, industrial crops)
5	Classification of legumes, forage crops, medicinal plants; economic importance
6	Biological features of plants – basic concepts related to flowers, pollination, fertilization, seed formation
7	Plant propagation: vegetative propagation (definition, methods, characteristics), generative propagation
8	Midterm Exam
9	Principles of plant production in vegetable growing
10	Principles of plant production in fruit growing
11	Irrigated and dry farming; principles in field crop production
12	Principles of field crop production
13	Principles of field crop production
14	Final Exam

COURSE DESCRIPTION FORM

Course Code and Name: TTO203 - Organic Plant Production II

Program: Organic Farming

Semester	Theory	Practice	Total Hours	Credits	AKTS	Course Language:	Course Type Compulsory/Elective
Spring Semester	2	2	4	3	6	Turkish	Compulsory

Course Prerequisites

None .

Instructor:

Assoc. Prof. Dr. Neslihan
TAŞAR

Email : ntasar@munzur.edu.tr

Web :

<https://www.munzur.edu.tr/birimler/akademik/myo/tmyo/bolumler/bitkisel/Pages/akadro.aspx>

Course Objectives

This course aims to ensure that students comprehend the basic concepts related to plant production, and understand key practices such as sowing-planting, soil tillage, irrigation, fertilization, disease, pest and weed control, pruning, and harvesting in both horticultural and field crops.

Learning Outcomes and Competencies

1. Explain the principles of generative propagation (seed propagation) and its application techniques in vegetables.
2. Define vegetative propagation methods using plant organs (rhizome, tuber, bulb, layering, cutting) and analyze their advantages.
3. Distinguish between types of bud grafting and whip grafting, explaining their application areas and benefits.
4. Describe propagation through tissue culture and evaluate its importance in plant production.
5. Assess the impacts of propagation techniques used in organic plant production on sustainability, quality, and productivity.

Course Material

Lecture Notes

Course Delivery

Face-to-face, Online

Teaching Methods and Techniques

- * Lecture
- * Q&A
- * Presentation
- * Practice
- * Analysis

Evaluation Criteria	Assessment Type	If applicable, mark (X)	Percentage (%) Contribution to Overall Grade
	Midterm Exam	X	40%
	Final Exam		
	Oral Exam		
	Final Exam	X	60%-

Course Weekly Schedule

Week	Topics
1	Generative propagation
2	Propagation by seed in vegetables
3	Vegetative propagation using plant organs
4	Propagation by rhizomes
5	Propagation by tubers
6	Propagation by bulbs
7	Propagation by layering and its advantages
8	Midterm Exam
9	Types of budding
10	Cases where budding is necessary
11	Types of grafting
12	Advantages of grafting

13	Propagation via tissue culture
14	Final Exam

COURSE DESCRIPTION FORM

Course Code and Name: TTO305 - Organic Fertilizers and Fertilization I

Program: Organic Farming

Semester	Theory	Practice	Total Hours	Credits	AKTS	Course Language:	Course Type Compulsory/Elective
Fall Semester	3	-	3	3	4	Turkish	Compulsory
Course Prerequisites		None .					
Instructor:		Assoc. Prof. Dr. Neslihan TAŞAR			Email : ntasar@munzur.edu.tr Web : https://www.munzur.edu.tr/birimler/akademik/myo/tmyo/bolumler/bitkisel/Pages/akadro.aspx		
Course Objectives		The importance of plant nutrition, the concepts of fertilizer and fertilization, classification of fertilizers, fertilizer production and methods, calculations for determining the nutrient requirements of plants, introduction of new trend fertilizers, the relationship between plant nutrition and fertilization, and explanation of the relationships between fertilizer–plant–soil–environment.					
Learning Outcomes and Competencies		1. Define the concepts of plant nutrition and fertilization. 2. Distinguish between macro and micronutrients and explain their roles in plant development 3. Evaluate the importance of organic fertilizers, compost, and vermicompost in plant nutrition. 4. Classify types of chemical fertilizers and apply fertilizer requirement calculation methods. 5. Identify symptoms of nutrient deficiencies in plants and develop solutions to prevent these conditions. 6. Explain the uses and effects of fertilizers containing nitrogen, phosphorus, potassium, sulfur, and micronutrients. 7. Describe the characteristics and application techniques of foliar fertilizers.					
Course Material		Lecture Notes					
Course Delivery		Face-to-face, Online					

Teaching Methods and Techniques

Explanation
Presentation
Group Work
Field Work

Evaluation Criteria	Assessment Type	If applicable, mark (X)	Percentage (%) Contribution to Overall Grade
	Midterm Exam	X	40%
	Final Exam		
	Oral Exam		
	Final Exam	X	60%

Course Weekly Schedule

Week	Topics
1	Introduction – Concepts of Plant Nutrition and Fertilization
2	Importance of Plant Nutrition
3	Macro and Micro Plant Nutrient Elements
4	Organic Fertilizers in Plant Nutrition
5	Importance of Compost and Vermicompost in Plant Nutrition
6	Chemical Fertilizers in Plant Nutrition – Fertilizer Requirement Calculations
7	Examination of Fertilizer Samples Used in Plant Nutrition
8	Midterm Exam
9	Nitrogen Fertilizers
10	Phosphorus Fertilizers
11	Potassium Fertilizers
12	Sulfur-Containing Fertilizers

13	Micronutrient-Containing Fertilizers
14	Final Exam

DESCRIPTION FORM OF COURSE

Course Code and Name: TTO 315 Seminar				Program: <u>Organic Farming Programme</u>			
Semester	Theory	Prac.	Total	Credits	ECTS	Language of Course	Course Type Compulsory/Elective
Fall Semester	2	0	2	2	2	Turkish	Compulsory
Prerequisites of Course		There are no prerequisites.					
Course Instructor		Prof. Dr. Rahmi AYDIN			Mail : raydin@munzur.edu.tr Web : https://scholar.google.com/citations?hl=tr&user=RIVWw4MAAAAJ		
Aims of Course		The Seminar Course is conducted to develop the student's ability to explain a selected topic and speak in front of a crowd					
Course Learning Outcomes and Competencies		Develop knowledge related to his/her own research topic Apply necessary research and writing skills Follow principles of research ethics and plagiarism Evaluate his/her own work adequately Present his/her own research topic orally					
Textbooks and /or Other Required Materials		Seminar writing rules lecture notes					
Method of delivery of the course		Face to face					
Teaching Methods and Techniques		Seminar preparation					

		If yes, please mark (X)	Percentage (%) Contribution to the Overall Average
	1. Midterm Exam	X	40

Evaluation Criteria	2. Midterm Exam		
	3. Midterm Exam		
	Oral Exam		
	Practical Exam (Lab, Project etc.)		
	Semester Final Exam	X	60

Semester Course Plan	
Week	Syllabus
1	Determining a seminar topic
2	Importance of seminar course
3	What to consider when writing a seminar
4	How to cite sources in seminars
5	How to cite a source taken from the internet
6	What is plagiarism
7	Choosing a seminar topic
8	Writing the seminar
9	Checking whether the written seminars are done according to the rules
10	Checking the spelling rules of the seminars
11	Checking the spelling rules of the seminars
12	Finishing the seminar
13	Receiving the seminar electronically
14	Examining and evaluating the seminars
15	General Exam

DESCRIPTION FORM OF COURSE

Course Code and Name: TRD101 Turkish Language-I				Program: Organic Farming			
Semester	Theory	Prac.	Total	Credits	ECTS	Language of Course	Course Type Compulsory/Elective
Fall Semester	2	0	2	2	2	Türkisch	Compulsory
Prerequisites of Course		There are no prerequisites.					
Course Instructor							
Aims of Course		It aims to show students the characteristics and rules of the Turkish Language with examples; to provide them with the skills and habits of expressing their feelings, thoughts, plans, impressions, observations, and experiences correctly and effectively in words and writing; to develop their vocabulary through written and spoken texts; to teach them the rules of correctly understanding the texts they read or the programs they listen to; and to develop their language skills, which are the basis of communication between individuals and masses.					
Course Learning Outcomes and Competencies		1. Will be able to have general information about the concept of language. 1.1. Definition and birth of language; culture, thought and communication. 1.2. Understands the differences between written language and spoken language. 2. Will be able to gain correct and planned writing skills. 2.1. Learns the details of paper layout and paragraph information. 2.2. Gains competence in written communication by doing writing studies. 3. Will be able to have information about spelling rules and punctuation marks. 3.1. Uses punctuation marks correctly in the text. 3.2. Eliminates ambiguity in written communication by learning the details of spelling rules. 4. Will be able to have general information about the rules of petition. 4.1. Learns how to write a petition correctly. 4.2. Applies the rules in official correspondence.					
Textbooks and /or Other Required Materials		Images/visuals, slides, videos and lecture notes on the course content.					
Method of delivery of the course		Face to face / Online					
Teaching Methods and Techniques		Explanation, Question-Answer, Discussion, Brainstorming, Individual Work, Team/Group Work					

		If yes, please mark (X)	Percentage (%) Contribution to the Overall Average
	1. Midterm Exam	X	40

Evaluation Criteria	2. Midterm Exam		
	3. Midterm Exam		
	Oral Exam		
	Practical Exam (Lab, Project etc.)		
	Semester Final Exam	X	60

Semester Course Plan	
Week	Syllabus
1	Definition and Function of Language
2	Languages/Birth of Language
3	Written Language and Spoken Language
4	Paper Layout and Paragraph Information
5	Paragraph Plan
6	Writing and Writing Plan
7	Writing Practices
8	Midterm
9	Writing Rules
10	Writing Rules
11	Punctuation Marks
12	Punctuation Marks
13	Petition
14	Writing Studies
15	Final exam

DESCRIPTION FORM OF COURSE

Course Code and Name: TRD102 Turkish Language-II				Program: Organic Farming			
Semester	Theory	Prac.	Total	Credits	ECTS	Language of Course	Course Type Compulsory/Elective
Spring	2	0	2	2	2	Turkish	Compulsory
Prerequisites of Course		There are no prerequisites.					
Course Instructor							
Aims of Course		To teach and/or remind the importance and subtleties of Turkish and to reinforce this with correct Turkish and its resources. In addition, to ensure that students use Turkish more consciously in daily conversations and correspondence throughout the course.					
Course Learning Outcomes and Competencies		1. Will be able to learn information for correct and proper expression. 1.1. Knows the importance of written expression and writes compositions. 1.2. Knows the rules of communication in oral expression. 2. Will be able to comprehend Turkish grammar. 2.1. Knows and applies sound events. 2.2. Understands morphology (root-stem-suffixes). 3. Will be able to analyze words in terms of their structure. 3.1. Develops and changes words. 3.2. Derives new words. 4. Uses the principles and techniques of speaking and discussion. 4.1. Applies Turkish spelling rules in speaking and discussion. 4.2. Can notice and correct expression errors in oral and written expressions.					
Textbooks and /or Other Required Materials		Zeynep Korkmaz ve ark., Türk Dili ve Kompozisyon Bilgileri, 6. Baskı, Ankara: Yargı Yayınevi, 2003. Yusuf Çotuksöken, Türk Dili, c. I-II, Papatya yay., 2003. Akın Önen, Türkçeyi Türkçe Konuşmak (Diksiyon - Spikerlik - Etkili Konuşma), İnkılap Yayınevi, İstanbul, 2007. Mustafa Durmuş, Türk Dili El Kitabı, Grafiker Yay., 2009. Muharrem Ergin, Türk Dil Bilgisi, Bayrak Basım Yayım Tanıtım, İstanbul, İbrahim Delice, Türkçe Sözdizimi, Kitabevi Yay., 2007.					
Method of delivery of the course		Face to face / Online					
Teaching Methods and Techniques		Explanation, Question-Answer, Discussion, Brainstorming, Individual Work, Team/Group Work					

		If yes, please mark (X)	Percentage (%) Contribution to the Overall Average
	1. Midterm Exam	X	40

Evaluation Criteria	2. Midterm Exam		
	3. Midterm Exam		
	Oral Exam		
	Practical Exam (Lab, Project etc.)		
	Semester Final Exam	X	60

Semester Course Plan	
Week	Syllabus
1	Punctuation marks (Period, comma, semicolon, colon, exclamation point ...)
2	Spelling rules (Writing of capital letters, numbers, compound words)
3	Spelling rules (Writing of idioms, reduplications, loanwords and foreign proper names)
4	Spelling rules (Writing of abbreviations and some suffixes)
5	Composition (definition, purpose, methods of being successful in composition)
6	Methods in writing composition (formation of supporting and main ideas, planning)
7	Methods in writing composition (paragraph creation, methods of developing thought in paragraph)
8	Midterm Exam
9	Expression characteristics
10	Expression characteristics
11	Expression disorders
12	Types of expression (oral expression)
13	Types of expression (written expression: resume, petition...)
14	Types of expression (written expression: story, novel, theater, poetry...)
15	Final exam

DESCRIPTION FORM OF COURSE

Course Code and Name: YDİ 131.1. İNGİLİZCE -I				Program: Organic Farming Program			
Semester	Theory	Prac.	Total	Credits	ECTS	Language of Course	Course Type Compulsory/Elective
Fall Semester	2	0	2	2	2	Turkish	Compulsory
Prerequisites of Course		There are no prerequisites.					
Course Instructor							
Aims of Course		It aims to provide students with information about English grammar and vocabulary and to enable them to use these in daily life.					
Course Learning Outcomes and Competencies		1. Will be able to learn the tenses used in English. 2. Will be able to make dialogues in English and use the tenses he/she learned. 3. Will be able to read English texts. 3.1. Reads and comments on English stories. 3.2. Reads English newspaper articles. Translates them into Turkish.					
Textbooks and /or Other Required Materials		Images/visuals, slides, videos and lecture notes on the course content.					
Method of delivery of the course		Online					
Teaching Methods and Techniques		Explanation, Question-Answer					

Evaluation Criteria		If yes, please mark (X)	Percentage (%) Contribution to the Overall Average
	1. Midterm Exam	X	40
	2. Midterm Exam		
	3. Midterm Exam		
	Oral Exam		
	Practical Exam (Lab, Project etc.)		

	Semester Final Exam	X	60
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Semester Course Plan	
Week	Syllabus
1	Present Form of 'to be'
2	Subject Pronouns, Countries and Nationalities
3	Family Members, Possesive Adjectives
4	Possesive Case, Have got/Has got, Adjectives
5	Singular&Plural Nouns& a/an, This/That/These/Those, Countable&Uncountable Nouns
6	Some&Any&How much&How many
7	Revision
8	Midterm Exam
9	Parts of the House&Furniture, There is/There are, Prepositions of Place, Can/Can't
10	Telling the Time, Days& Months, Prepositions of Time
11	The Simple Present Tense
12	Adverbs of Frequency, Object Pronouns
13	Reading, analyzing, interpreting, and evaluating English texts
14	General Revision
15	Final exam

DESCRIPTION FORM OF COURSE

Course Code and Name: YDİ 132.1. İNGİLİZCE II				Program: Organic Farming Program			
Semester	Theory	Prac.	Total	Credits	ECTS	Language of Course	Course Type Compulsory/Elective
Spring Semester	2	0	2	2	2	Turkish	Compulsory
Prerequisites of Course		There are no prerequisites.					
Course Instructor							
Aims of Course		It aims to provide students with information about English grammar and vocabulary and to enable them to use these in daily life.					
Course Learning Outcomes and Competencies		1. Will be able to learn the tenses used in English. 2. Will be able to make dialogues in English and use the tenses he/she learned. 3. Will be able to read English texts. 3.1. Reads and comments on English stories. 3.2. Reads English newspaper articles. Translates them into Turkish.					
Textbooks and /or Other Required Materials		Images/visuals, slides, videos and lecture notes on the course content.					
Method of delivery of the course		Online					
Teaching Methods and Techniques		Explanation, Question-Answer					

Evaluation Criteria		If yes, please mark (X)	Percentage (%) Contribution to the Overall Average
	1. Midterm Exam	X	40
	2. Midterm Exam		
	3. Midterm Exam		
	Oral Exam		
	Practical Exam (Lab, Project etc.)		

	Semester Final Exam	X	60
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Semester Course Plan	
Week	Syllabus
1	The Present Continuous Tense
2	Weather&Season&Clothes
3	The Present Simple or The Present Continuous Tense
4	Past Form of ‘To be’
5	The Past Simple Tense with Regular Verbs
6	The Past Simple Tense with Irregular Verbs
7	Revision
8	Midterm Exam
9	The Past Continuous Tense
10	Comparative Forms of Adjectives
11	Superlative Forms of Adjectives
12	Giving Advice (Should/Shouldn’t)
13	The Future Tense (be going to)
14	The Future Tense (will)
15	Final Exam