|  |  |  |
| --- | --- | --- |
| **C:\Users\SCULPT~1\AppData\Local\Temp\Rar$DR26.016\logo_2013\logo_2013\logo_2013.jpg** | **AĞRI İBRAHİM ÇEÇEN UNIVERSITY****VOCATIONAL SCHOOL****DEPARTMENT OF PLANT AND ANIMAL PRODUCTION****ORGANIC AGRICULTURE PROGRAMME** | https://www.agri.edu.tr/UserFiles/CKUpload/Upload/myo_logo_1_renkli.jpg |

**1ST YEAR FALL SEMESTRE**

**OBLIGATORY COURSES**

|  |  |  |  |
| --- | --- | --- | --- |
| **COURSE CODE** | **NAME OF THE COURSE** | **SEMESTRE** | **WEEKLY COURSE HOURS** |
| OT-101  | BOTANY | 1ST SEMESTRE | **T** | **A** | **C** | **ECTS** |
| **3** | **0** | **3** | **5** |
| **COURSE CONTENT** | Classification of Botanical Sciences, Cytology (cell science: protoplasm, Chromosomes, cytoplasm, cell membrane, nucleus, cell division, etc), histology (tissue science; intercellular spaces, classification of tissues); Organography (root, stem, leaf); Plant systematics; Plant reproduction, (Sexual and asexual reproduction, flower structure, ovarian structure, symmetry in flowers, flower formula and diagram, flower situations, pollination and fertilization Fruit and fruit types) |
| **COURSE CODE** | **NAME OF THE COURSE** | **SEMESTRE** | **WEEKLY COURSE HOURS** |
| OT-103 | FIELD CROPS | 1ST SEMESTRE | **T** | **A** | **C** | **ECTS** |
| **2** | **2** | **3** | **5** |
| **COURSE CONTENT** | Introduction to the Field Crops, Classification of the Field Crops, Seedling, Field Agricultural Systems and Tillage, Fallow, Seeding and Rotation, Fertilization and Irrigation, Weeds and Weed Control, Harvesting, Field Crops Breeding, Agronomy of Cereals and Industrial Crops, Food legumes, Forage Crops, Aromatic and Medicinal Plants |
| **COURSE CODE** | **NAME OF THE COURSE** | **SEMESTRE** | **WEEKLY COURSE HOURS** |
| OT-105 | SOIL SCIENCE | 1ST SEMESTRE | **T** | **A** | **C** | **ECTS** |
| **2** | **2** | **3** | **5** |
| **COURSE CONTENT** | Definition of the soil, Formation of the soils, Soil Main Material, Soil Characteristics, Soil Characterization Factors, Soil Profiles, Soil Classification, Physical and Chemical Properties of Soils, Factors Affecting Soil Formation, Soil Ripening Phenomena, Concept of Soil Fertility, Factors Affecting Soil Fertility, Soil Reaction, Soil Water, Soil Microorganisms, Soil Organic Matter, Soil Air, Soil Temperature, Organic Soils, Lime and salinity in Soils, Definition and Classification of Plant Nutrients in Soils, Factors Affecting Plant Nutrients Uptake by Plants, Transport and Distribution of Plant Nutrients and their Functions in Plants, Soil and Plant Analysis. |
| **COURSE CODE** | **NAME OF THE COURSE** | **SEMESTRE** | **WEEKLY COURSE HOURS** |
| MAT-101 | MATHEMATICS-I | 1ST SEMESTRE | **T** | **A** | **C** | **ECTS** |
| **2** | **0** | **2** | **3** |
| **COURSE CONTENT** | Basic Concepts (Numbers, Number Systems, Digit Concept etc.) Prime Multipliers, Exact Divisor Number, Division and Divisibility Rules, Greatest Common Divisor (GCD) and The Smallest of the Common Folds (LCM), Ranking, Simple Inequalities, Base Arithmetic, Equation Solving, Factorial, Absolute Value, Exponential and Rooted Numbers, Factors Separation, Identities, Angles, Angle-Edge Connections, bisector, The middle of edge, Triangles (Vertical, Equilateral, Special etc.), Polygons.  |
| **COURSE CODE** | **NAME OF THE COURSE** | **SEMESTRE** | **WEEKLY COURSE HOURS** |
| UZTDE-101 | TURKISH LANGUAGE -I. | 1ST SEMESTRE | **T** | **A** | **C** | **ECTS** |
| **2** | **0** | **2** | **2** |
| **COURSE CONTENT** | Definition of the Language, The Importance of Language, The Birth of Languages, Spread and Structure, Languages, Language-Thought Relationship, Turkish Language and Term, Development, The Place of Turkish Language Among The World Languages, The Development and Historical Stages of Turkish Language, The Current Status and Spread of Turkish Language, Turkish Voices and Sound Features, Sound Events in Turkish, Syllable Knowledge, Turkish Grammar, Word, Sentence, Paragraphs, Reading and Understanding, Words and word Types, their Features and Usage in Sentences, Spelling and Punctuation Marks. Turkish suffixes, knowledge of composition, noun and verb inflection in Turkish. |
| **COURSE CODE** | **NAME OF THE COURSE** | **SEMESTRE** | **WEEKLY COURSE HOURS** |
| UZİNG-101 | FOREIGN LANGUAGE -I. | 1ST SEMESTRE | **T** | **A** | **C** | **ECTS** |
| **2** | **0** | **2** | **2** |
| **COURSE CONTENT** | Basic English Knowledge, Grammar, Listening, Reading, Speaking and Writing Skills, Translation Rules. |
| **COURSE CODE** | **NAME OF THE COURSE** | **SEMESTRE** | **WEEKLY COURSE HOURS** |
| UZATA-101 | ATATURK'S PRINCIPLES AND HISTORY OF TURKISH REVOLUTION -I. | 1ST SEMESTRE | **T** | **A** | **C** | **ECTS** |
| **2** | **0** | **2** | **2** |
| **COURSE CONTENT** | Concepts, General Situation Before and After World War I, Conditions Preparing Turkish Revolution, National War of Independence and Its Results, Atatürk's Life, Personal Characteristics and Various Aspects, Abolition of the Sultanate and Declaration of the Republic. Comparison of the Turkish Revolution and Atatürk Principles with Europe and Information on the history of Turkish modernization. |
| **COURSE CODE** | **NAME OF THE COURSE** | **SEMESTRE** | **WEEKLY COURSE HOURS** |
| BIL-101 | COMPUTER -I. | 1ST SEMESTRE | **T** | **A** | **C** | **ECTS** |
| **2** | **0** | **2** | **3** |
| **COURSE CONTENT** | Definition of Computer, History, Computer External Hardware, Internal Hardware, File Operating Systems, System Files, Configuration Files, File (File) Introduction, Introduction of the Concept of Directory, Introduction and Application of File Operating System, Internal and External Commands, Windows operating system, Windows Office Programs (Word, Excel) |
| **ELECTIVE COURSES** |
| **COURSE CODE** | **NAME OF THE COURSE** | **SEMESTRE** | **WEEKLY COURSE HOURS** |
| OT-107 | RESEARCH METHODS AND TECHNIQUES | 1ST SEMESTRE | **T** | **A** | **C** | **ECTS** |
| **2** | **0** | **2** | **3** |
| **COURSE CONTENT** | Information, types of knowledge and scientific knowledge, Determining Research Topic, Critical Literature Search, Universe and Sampling, Scientific Method, Research and Research Models, Data Collection Tools and Analysis, Research Process and Stages, Data and Data Types, Data Analysis Methods, Findings and Discussion, Academic Writing, Explaining and Presenting the Results |
| **COURSE CODE** | **NAME OF THE COURSE** | **SEMESTRE** | **WEEKLY COURSE HOURS** |
| SS-109 | SCIENTIFIC PRINCIPLES OF TECHNOLOGY | 1ST SEMESTRE | **T** | **A** | **C** | **ECTS** |
| **2** | **0** | **2** | **3** |
| **COURSE CONTENT** | Basic Concepts and Principles of Physics, Measurement and Metric System, Precision. Basic Mathematical Concepts, Scalar and Vector Sizes, Balance, Kinematics, Dynamics, Work, Power, Energy, Heat and Temperature, Pressure and Lifting Force, Experimenting and Systematic Interpretation of Experimental Results. |
| **COURSE CODE** | **NAME OF THE COURSE** | **SEMESTRE** | **WEEKLY COURSE HOURS** |
| SS-101 | COMMUNICATION | 1ST SEMESTRE | **T** | **A** | **C** | **ECTS** |
| **2** | **0** | **2** | **3** |
| **COURSE CONTENT** | Definition of Interpersonal Communication, Communication Model, Communication Elements and Features, Effective Listening and Feedback, Factors that Prevent Interpersonal Communication (Source, Channel, Receiver, etc.), Factors Facilitating Communication, Role and Use of Emotions in Communication, Conflict in Communication and its prevention, Important Considerations in Student, Teacher and Parent Communication, Communication Applications. |
| **COURSE CODE** | **NAME OF THE COURSE** | **SEMESTRE** | **WEEKLY COURSE HOURS** |
| SS-103 | OCCUPATIONAL HEALTH AND SAFETY | 1ST SEMESTRE | **T** | **A** | **C** | **ECTS** |
| **2** | **0** | **2** | **3** |
| **COURSE CONTENT** | Occupational Health and Safety, Historical Development of Occupational Health and Business, Purpose and Importance of Safety, Health and Concepts of Health in Turkey, General Overview of occupational health and safety, Occupational Accidents and Diseases, Preventive measures to be taken against Occupational Accidents and diseases, The cost of occupational Accidents and diseases, International and National Organizations in Occupational Health and Safety. |
| **COURSE CODE** | **NAME OF THE COURSE** | **SEMESTRE** | **WEEKLY COURSE HOURS** |
| SS-105 | LIFE SKILL AND SOCIAL ACTIVITY | 1ST SEMESTRE | **T** | **A** | **C** | **ECTS** |
| **2** | **0** | **2** | **3** |
| **COURSE CONTENT** | Self-Realization, Self-Recognition, Communication, Factors That Prevent Communication, Social Skills, Saying No, Problem Solving, Self-Disclosure, Anger, Stress, Excitement, Anxiety and Fear etc., Coping with Forced Emotions, Making Healthy Decisions, Speaking in front of the Community, Self-Concept, Career and Career Planning, CV Preparation, Efficient Studying, Enterprise and Entrepreneurial Behaviour Development, Emotional Intelligence. |
| **COURSE CODE** | **NAME OF THE COURSE** | **SEMESTRE** | **WEEKLY COURSE HOURS** |
| SS-107 | UNIVERSITY AND CAREER SUCCESS | 1ST SEMESTRE | **T** | **A** | **C** | **ECTS** |
| **2** | **0** | **2** | **3** |
| **COURSE CONTENT** | The importance of career planning and development. Effective CV preparation. Successful job applications and job interviews. Transferring experiences on career and presenting suggestions about work life. |

**1ST YEAR SPRING SEMESTRE**

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| **COURSE CODE** | **NAME OF THE COURSE** | **SEMESTRE** | **WEEKLY COURSE HOURS** |
| OT-102 | ECOLOGY | 2ND SEMESTRE | **T** | **A** | **C** | **ECTS** |
| **3** | **0** | **3** | **4** |
| **COURSE CONTENT** | Definition, Development and Scope of Ecology, Basic Concepts in Ecology, Classification of Ecology, Ecosystem Concept, Definition of Plant Ecology, Relationship of Plants with Environment; Competition Between Plants; Ecological Conditions Required for Plant Development; Temperature, Light, Moisture, Atmosphere, Wind, Water and Its Effects; Soil Factors; Biological Factors and Their Interactions with Plants. |
| **COURSE CODE** | **NAME OF THE COURSE** | **SEMESTRE** | **WEEKLY COURSE HOURS** |
| OT-104 | HORTICULTURAL PLANTS | 2ND SEMESTRE | **T** | **A** | **C** | **ECTS** |
| **2** | **2** | **3** | **5** |
| **COURSE CONTENT** | Definition and Classification of Horticulture, Place of Horticulture in the national Economy, Biological and Physiological Features of Horticulture, Ecological Requirements of Horticulture, Reproduction of Horticultural plants, Garden and Vineyard Plants, Annual Maintenance Works, Grafting, Pruning, Horticultural Product Storage and Preparing for the Market. |
| **COURSE CODE** | **NAME OF THE COURSE** | **SEMESTRE** | **WEEKLY COURSE HOURS** |
| OT-106 | PLANT PRODUCTION PRINCIPLES | 2ND SEMESTRE | **T** | **A** | **C** | **ECTS** |
| **2** | **0** | **2** | **3** |
| **COURSE CONTENT** | Place and Importance of Plant Production in Turkish Economy, Definition and Classification of Plants, General Plant Production Techniques, Basic Concepts in Field and Horticultural crops, Pollination, fertilization, vernalization, Seed development, Tillage, Seeding and planting, Irrigation, fertilization, disease, pests and weed control, pruning, harvesting and threshing. |
| **COURSE CODE** | **NAME OF THE COURSE** | **SEMESTRE** | **WEEKLY COURSE HOURS** |
| OT-108 | GENERAL PRINCIPLES OF ORGANIC AGRICULTURE | 2ND SEMESTRE | **T** | **A** | **C** | **ECTS** |
| **2** | **0** | **2** | **3** |
| **COURSE CONTENT** | Organic Agriculture, Control Mechanism in Organic Agriculture, Principles of Starting Organic Agriculture, Organic Crop Production, Organic Animal Production, Organic Beekeeping and Aquaculture Production, Requirement of Organic Crop Production, Stages Related to Starting and Continuing Organic Crop Production, Legislation Regarding Organic Crop Production. |
| **COURSE CODE** | **NAME OF THE COURSE** | **SEMESTRE** | **WEEKLY COURSE HOURS** |
| UZTDE-102 | TURKISH LANGUAGE-II | 2ND SEMESTRE | **T** | **A** | **C** | **ECTS** |
| **2** | **0** | **2** | **2** |
| **COURSE CONTENT** | Sentence Knowledge and Practices, Forms of Expression, Features of Oral and Written Expression, Oral and Written Expression Disorders, Composition Arrangements, Words and Spelling Guide, Speech and Discussion Techniques, Writings in Daily Life, e.g. Petition Letter, Report, Note, Invitation, Telegram etc. Literary Analysis and Criticism on some Selected Samples of Turkish Literature, Text Reading and Examining, Literature Reviewing and Bibliography. Editing. |
| **COURSE CODE** | **NAME OF THE COURSE** | **SEMESTRE** | **WEEKLY COURSE HOURS** |
| UZİNG- 102 | FOREIGN LANGUAGE-II | 2ND SEMESTRE | **T** | **A** | **C** | **ECTS** |
| **2** | **0** | **2** | **2** |
| **COURSE CONTENT** | Strengthening the Basic Knowledge of English, Strengthening the Listening, Reading, Speaking and Writing Skills, Improving the Self- Expression skills for Daily Life. |
| **COURSE CODE** | **NAME OF THE COURSE** | **SEMESTRE** | **WEEKLY COURSE HOURS** |
| UZATA-102 | ATATURK'S PRINCIPLES AND HISTORY OF TURKISH REVOLUTION -II | 2ND SEMESTRE | **T** | **A** | **C** | **ECTS** |
| **2** | **0** | **2** | **2** |
| **COURSE CONTENT** | Atatürk's Revolutions and Their Aims (Revolutions in Political, Legal, Educational and Cultural, Social and Economic Fields), Atatürk's Principles (Republicanism, Nationalism, Populism, Secularism, Etatism, Revolution), Integrative Principles, Characteristics of the Turkish Revolution, Universal Values of Turkish Revolution. |
| **COURSE CODE** | **NAME OF THE COURSE** | **SEMESTRE** | **WEEKLY COURSE HOURS** |
| BIL-102 | COMPUTER-II | 2ND SEMESTRE | **T** | **A** | **C** | **ECTS** |
| **2** | **0** | **2** | **2** |
| **COURSE CONTENT** | Microsoft Word, Microsoft Excel, Microsoft PowerPoint, Microsoft Outlook |
| **COURSE CODE** | **NAME OF THE COURSE** | **SEMESTRE** | **WEEKLY COURSE HOURS** |
| MAT-102 | MATHEMATICS-II | 2ND SEMESTRE | **T** | **A** | **C** | **ECTS** |
| **2** | **0** | **2** | **3** |
| **COURSE CONTENT** | Rate- Ratio, Equation Solving Problems (Number, Fraction, Age, Worker, Pool, Percentage, Profit-Loss, Mixture, Speed, Time, etc.), Clusters, Relationships and Functions, Operation, Modular Arithmetic, Permutation, Combination, Probability, Parallelogram, Trapezoid, Circle, Circle, Area Calculations, Analytical Geometry. |
| **COURSE CODE** | **NAME OF THE COURSE** | **SEMESTRE** | **WEEKLY COURSE HOURS** |
| DOY-102 | DIGITAL LITERACY | 2ND SEMESTRE | **T** | **A** | **C** | **ECTS** |
| **0** | **0** | **0** | **3** |
| **COURSE CONTENT** | Digital Technologies, Digital Media, and Tools Recognition. Finding, Processing, Editing, Sharing, Evaluating and Analysing the Information, Use of Digital Technologies. Achieving Competence in Use of Digital Media and Tools. Raising Awareness and Query Levels in Related Areas. |
| **SEÇMELİ DERSLER** |
| **COURSE CODE** | **NAME OF THE COURSE** | **SEMESTRE** | **WEEKLY COURSE HOURS** |
| OT-110 | GREENHOUSE CONSTRUCTION TECHNIQUES | 2ND SEMESTRE | **T** | **A** | **C** | **ECTS** |
| **2** | **0** | **2** | **3** |
| **COURSE CONTENT** | Greenhouse Agriculture and Concepts, Greenhouse History of Agriculture, Greenhouse in the world and Turkey, Classification of Greenhouses, Factors Affecting the Location Selection for Greenhouses, Greenhouse Construction Materials and Components, Mounting Systems by Greenhouse Types, Greenhouse Material Types and Characteristics, Preparation of Soil and places for plant growth in Greenhouses, Illumination, ventilation, heating and cooling systems in the greenhouses, The elements of the greenhouses, Ecological factors in greenhouses and their control, Other factors affecting greenhouse farming, Agronomic practices in greenhouse vegetables, Alternative production techniques in greenhouse farming |
| **COURSE CODE** | **NAME OF THE COURSE** | **SEMESTRE** | **WEEKLY COURSE HOURS** |
| OT-112 | CONTROL AND CERTIFICATION IN ORGANIC AGRICULTURE | 2ND SEMESTRE | **T** | **A** | **C** | **ECTS** |
| **2** | **0** | **2** | **3** |
| **COURSE CONTENT** | The Importance of Control and Certification in Organic Agriculture, Control Mechanisms, Certification Institutions and their Characteristics, Certification process, General Problems and Solution Suggestions during Certification Stage, Transition period and Problems Encountered in Transition, Pest management in Organic Agriculture, The Importance of Certification in Packing, General Features of Certificates in Packs. |
| **COURSE CODE** | **NAME OF THE COURSE** | **SEMESTRE** | **WEEKLY COURSE HOURS** |
| OT-213 | ORNAMENTAL PLANTS AND ORGANIC LANDSCAPE | 2ND SEMESTRE | **T** | **A** | **C** | **ECTS** |
| **2** | **0** | **2** | **3** |
| **COURSE CONTENT** | Importance of Ornamental Plants, Important Ornamental Plants, General Care Rules in Ornamental Plants, Production Techniques in Ornamental Plants, Organic Landscape, Organic Landscape in the Production of Ornamental Plants. |
| **COURSE CODE** | **NAME OF THE COURSE** | **SEMESTRE** | **WEEKLY COURSE HOURS** |
| SS-104 | QUALITY ASSURANCE AND STANDARDS | 2ND SEMESTRE | **T** | **A** | **C** | **ECTS** |
| **2** | **0** | **2** | **3** |
| **COURSE CONTENT** | Standardization, Historical Development of Standardization, Standard, Relevant institutions and their works on standards, Quality and Quality Concepts, Quality Control, Total Quality Management, Problem Solving Methods, New Quality Tools, Quality Assurance, Quality Assurance Systems, Professional Standards. |
| **COURSE CODE** | **NAME OF THE COURSE** | **SEMESTRE** | **WEEKLY COURSE HOURS** |
| SS-106 | ENVIRONMENTAL PROTECTION | 2ND SEMESTRE | **T** | **A** | **C** | **ECTS** |
| **2** | **0** | **2** | **3** |
| **COURSE CONTENT** | Environment and the definitions regarding environment, Environmental Pollution, Ecology, Air Pollution, Water Pollution, Soil Pollution, Negative Effects of Environmental Pollution, Learning the Impact of Environment on Health, Population Growth and Understanding Environmental Problems Brought by Development. |
| **COURSE CODE** | **NAME OF THE COURSE** | **SEMESTRE** | **WEEKLY COURSE HOURS** |
| SS-108 | OCCUPATIONAL ETHICS | 2ND SEMESTRE | **T** | **A** | **C** | **ECTS** |
| **2** | **0** | **2** | **3** |
| **COURSE CONTENT** | Definition of Ethics Concept, Ethics and moral Relationship, Historical Development of Ethics, Ethics in the view of Philosophy, Objectives and aims of Ethics, Ethics Vision and Theories, Basic Ethical Theory Types, Basic Approaches in Ethical Evaluation, Introduction to Business Ethics, Historical Development of Business Ethics, Place and Importance of Ethics in Business Life, Occupational Behaviour Principles, Professional and Ethical Responsibility Understanding, Conflict of Interest, Necessities and Opportunities, Ethical Decision Making and Effective Factors, Personal Factors, Institutional Structure, Culture, Professional Ethical Principles, Ethical Principles and Human Rights, Ethical Models, Professional Corruption, Results of Unethical Behaviours, Problems and Solutions in the Application of Ethical Principles, Ethics in Scientific Research. |

**2ND YEAR FALL SEMESTRE**

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| **COURSE CODE** | **NAME OF THE COURSE** | **SEMESTRE** | **WEEKLY COURSE HOURS** |
| OT-201 | AGRICULTURAL STRUCTURES AND IRRIGATION | 3RD SEMESTRE | **T** | **A** | **C** | **ECTS** |
| **2** | **2** | **3** | **4** |
| **COURSE CONTENT** | A. IRRIGATION: Definition, importance and history of the Irrigation, Potential Soil and Water Resources in Turkey, Irrigable Land Availability, Provision of Irrigation Water, Soil Water and Plant Relationships, Infiltration, Evapotranspiration, Planning Principles of Irrigation Systems, Planning of the open irrigation canals, Irrigation Program and Irrigation System, Water Distribution Types, Quality and Classification of Irrigation Water, Irrigation Methods, DrainageB. AGRICULTURAL STRUCTURES: Rural Settlements, Arrangement of Courtyards and Buildings in Agricultural Enterprises, Environmental Conditions for Agricultural Structures, Building Elements and Building Materials in Agricultural Structures, Agricultural Structures and Facilities, Animal Shelters, Planning of Greenhouses. |
| **COURSE CODE** | **NAME OF THE COURSE** | **SEMESTRE** | **WEEKLY COURSE HOURS** |
| OT-203 | PLANT PROTECTION | 3RD SEMESTRE | **T** | **A** | **C** | **ECTS** |
| **2** | **2** | **3** | **4** |
| **COURSE CONTENT** | Symptomatology in terms of Plant Disease Agents (Fungi, Bacteria, Viruses). Hygiene and Therapy Methods for Aetiology, Pathology, Epidemiology and Plant Disease Factors; Symptoms, Diagnosis, Control and Prevention Methods for Plant Abiotic Diseases; Classification, Biology, Damage Types of Weeds, and Proper protection Techniques and Medicines regarding Organic Agriculture; Systematic Locations of Animal Organisms (Insects, Mites, Nematodes, Molluscs, Rodents and Birds, etc.) that Make Damage in crops, Morphological Structures, Reproduction and Development, Life Cycles, Damage Types and Symptoms of Plant Pests, Economic Importance of Pests, Protection Techniques Against Plant Pests |
| **COURSE CODE** | **NAME OF THE COURSE** | **SEMESTRE** | **WEEKLY COURSE HOURS** |
| OT-205 | AGRICULTURAL MECHANIZATION | 3RD SEMESTRE | **T** | **A** | **C** | **ECTS** |
| **2** | **2** | **3** | **4** |
| **COURSE CONTENT** | Introduction to Agricultural Mechanization, Energy Sources and Machinery in Agriculture, Agricultural Tractors, Agricultural Mechanization Planning, Soil Processing, Fertilizer Distribution, Sowing, Mowing, Bale, Plant Protection and Maintenance Machines. |
| **COURSE CODE** | **NAME OF THE COURSE** | **SEMESTRE** | **WEEKLY COURSE HOURS** |
| OT-207 | FERTILIZERS AND FERTILIZATION | 3RD SEMESTRE | **T** | **A** | **C** | **ECTS** |
| **2** | **2** | **3** | **5** |
| **COURSE CONTENT** | Historical Development of Fertilization, Fertilizer and Fertilization, Reasons of Fertilizer Use, Definition and Classification of Fertilizer, Organic Fertilizers, Nitrogenous, Phosphorus and Potassium Fertilizers, Calcium, Magnesium and Sulphur Fertilizers, Micronutrient Containing Fertilizers, Control of Compound Fertilizers, Control of fertilizer solubility. Factors affecting fertilizer use, Fertilization Methods, Effect of Fertilizers on the Environment, Determination of Fertilizer Needs of Soils, Calculation of Fertilizer Amount. |
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| **COURSE CODE** | **NAME OF THE COURSE** | **SEMESTRE** | **WEEKLY COURSE HOURS** |
| OT-209 | GENETIC | 3RD SEMESTRE | **T** | **A** | **C** | **ECTS** |
| **3** | **0** | **3** | **4** |
| **COURSE CONTENT** | Introduction to Genetics, Cytological Principles of Inheritance, Inheritance and Inheritance Types, Gender and Gender-Related Characters, Cohesion and crossing over in genes, Population Genetics, Mutations, Genetic Engineering. |
| **COURSE CODE** | **NAME OF THE COURSE** | **SEMESTRE** | **WEEKLY COURSE HOURS** |
| OT-211 | SEED TECHNOLOGIES | 3RD SEMESTRE | **T** | **A** | **C** | **ECTS** |
| **2** | **2** | **3** | **4** |
| **COURSE CONTENT** | Introduction to Seed Technologies, Formation and Development of seed, Seed Chemistry, Seed Germination, Seed Viability and Viability Tests, Seed Dormancy, Life and lifespan of seed, Seed Controls, Seed Certification. |
| **ELECTIVE COURSES** |
| **COURSE CODE** | **NAME OF THE COURSE** | **SEMESTRE** | **WEEKLY COURSE HOURS** |
| SS-102 | ENTREPRENEURSHIP | 3RD SEMESTRE | **T** | **A** | **C** | **ECTS** |
| **3** | **0** | **3** | **5** |
| **COURSE CONTENT** | What is Entrepreneurship, Who is Entrepreneur, Different Entrepreneurship Examples, The Basics of Starting a Company, Creating a Business Model, Planning and Organization, Entrepreneurial Management (Smart Asset Management, Budgeting, Learning the Written Rules Required for Starting a Business), Team Building, The Way to Go Planning and Implementing Stages, Projecting, Basic Points to Consider When Establishing a Company, Basic Legal Transactions and Liabilities, Similar and Different Aspects of Capital Companies and Individual Companies, Planning Business Processes, Increasing Productivity, Modelling, Entrepreneurship Culture, Local and International Context of Entrepreneurship, and Moral Values of Entrepreneurship |
| **COURSE CODE** | **NAME OF THE COURSE** | **SEMESTRE** | **WEEKLY COURSE HOURS** |
| OT-215 | GRASSLANDS AND FORAGE CROPS | 3RD SEMESTRE | **T** | **A** | **C** | **ECTS** |
| **3** | **0** | **3** | **5** |
| **COURSE CONTENT** | History, Definition, Importance and management of the Meadow-Pasture Culture, Grazing Areas in the World, The Management of Meadow-Pasture Physiology and Morphology, Pasture-meadow Ecology, Grazing Management, Capacity, Season and Uniform Grazing, Animal Breed, Grazing Systems and Meadow Management. |
| **COURSE CODE** | **NAME OF THE COURSE** | **SEMESTRE** | **WEEKLY COURSE HOURS** |
| OT-217 | POST HARVEST TECHNOLOGY | 3RD SEMESTRE | **T** | **A** | **C** | **ECTS** |
| **3** | **0** | **3** | **5** |
| **COURSE CONTENT** | The Importance of Post-Harvest Technology for Agricultural Products, Processes, Cleaning, Partition, Classification, Packaging, Cooling, Storage and Transport, Pre-Cooling Techniques for Vegetables and Fruits, Quality Criteria in Vegetables and Fruits. |
| **COURSE CODE** | **NAME OF THE COURSE** | **SEMESTRE** | **WEEKLY COURSE HOURS** |
| OT-219 | EUROPEAN UNION and ORGANIC AGRICULTURE | 3RD SEMESTRE | **T** | **A** | **C** | **ECTS** |
| **3** | **0** | **3** | **5** |
| **COURSE CONTENT** | Development of Organic Agriculture in the world and Turkey, Organic Farming Practices in Europe and Turkey, Legislation, Overview of Organic Agriculture, Basics of starting Organic Farming, Control Mechanisms in Organic Agriculture. |
| **OSD** | COMMON ELECTIVE COURSES | 3RD SEMESTRE | **T** | **A** | **C** | **ECTS** |
| **3** | **0** | **3** | **5** |

**2nd YEAR SPRING SEMESTRE**

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| **COURSE CODE** | **NAME OF THE COURSE** | **SEMESTRE** | **WEEKLY COURSE HOURS** |
| OT-202 | COVERED VEGETABLE GROWING | 4TH SEMESTRE | **T** | **A** | **C** | **ECTS** |
| **2** | **2** | **3** | **5** |
| **COURSE CONTENT** | General Situation of Greenhouse farming in the World and Turkey, Role and Importance of Greenhouse growing in Agriculture, Introduction of Vegetable Concepts, Basic Concepts of Vegetable Growing, Greenhouse Growing Concept, Principles of Covered Vegetable Growing, Important Ecological and Social Factors for Covered vegetable Growing, Different Techniques Used in Covered Vegetable Growing, Low Plastic Tunnels, General Greenhouse Growing, Specific Greenhouse Growing, Factors Affecting Greenhouse Location Selection, Greenhouse Air Conditioning Arrangement, Mortar Preparation, Seedling Production, Greenhouse Soil Preparation, Mulch Application, Planting and Applied Maintenance Procedures. |
| **COURSE CODE** | **NAME OF THE COURSE** | **SEMESTRE** | **WEEKLY COURSE HOURS** |
| OT-204 | PLANT PHYSIOLOGY | 4TH SEMESTRE | **T** | **A** | **C** | **ECTS** |
| **3** | **0** | **3** | **4** |
| **COURSE CONTENT** | Structure of Plant Cells, Plant Water Relationships, Importance of Basic Plant Nutrients in Terms of Plant Physiology, Photosynthesis, Nitrogen and Sulphur Extraction, Transport of Photosynthesis Products, Respiration, Concepts of Growth and Development in Plants, Factors Affecting Growth and Development, Some Important Physiological Phenomena in Growth and Development, Resistance to Various Environmental Conditions in Plants. |
| **COURSE CODE** | **NAME OF THE COURSE** | **SEMESTRE** | **WEEKLY COURSE HOURS** |
| OT-206 | PROCESSING AND MARKETING OF THE ORGANIC PRODUCTS | 4TH SEMESTRE | **T** | **A** | **C** | **ECTS** |
| **2** | **0** | **2** | **4** |
| **COURSE CONTENT** | General Structures of Agricultural Products, Quality Criteria in Agricultural Products, Factors Affecting Quality Criteria, General Principles of Evaluation, Basic Processing Types in Food Technology, Quality of Technological Products and effective Factors, Microorganisms in Evaluation, Canned Food, Fruit Juice Production, Drying, Freezing and Freezing Preservation. Fermentative Evaluation, Standardization in Marketing, Packing House Processes, Post-Harvest Losses and Prevention Ways, Factors Affecting Quality Criteria in Agricultural Products, Storage of Products. Market Transportation, Marketing Economy. Importance of Marketing in Turkish Economy, Definitions and Scope of Agricultural Marketing, Effective Factors in Agricultural Marketing, Agricultural Marketing Service (Main Services, Utilities), Marketing Channels and Marketing Stages in Agricultural Products, Coverage Tool and Marketing Organizations in the Marketing of Agricultural Products in Turkey, Some Practices for Marketing Agricultural Products in Turkey. |
| **COURSE CODE** | **NAME OF THE COURSE** | **SEMESTRE** | **WEEKLY COURSE HOURS** |
| OT-208 | PRINCIPLES OF ANIMAL PRODUCTION  | 4TH SEMESTRE | **T** | **A** | **C** | **ECTS** |
| **2** | **0** | **2** | **4** |
| **COURSE CONTENT** | Animal Breeding Situation in Turkey, Specie and Race Concepts in Livestock, Reproduction and Fertility in Livestock, Practical Husbandry and Nutrition, Record Keeping and Evaluation Techniques. |
| **COURSE CODE** | **NAME OF THE COURSE** | **SEMESTRE** | **WEEKLY COURSE HOURS** |
| OT-210 | MEDICINAL AND AROMATIC PLANTS | 4TH SEMESTRE | **T** | **A** | **C** | **ECTS** |
| **3** | **0** | **3** | **4** |
| **COURSE CONTENT** | Introduction to Medicinal and Aromatic Plants, Grouping of Medicinal and Aromatic Plants, Ecological Requirements of Medicinal and Aromatic Plants, Basic Principles in the Culture of Medicinal and Aromatic Plants, Drying and Storage of Medicinal and Aromatic Plants, Utilization of Medicinal and Aromatic Plants. |
| **COURSE CODE** | **NAME OF THE COURSE** | **SEMESTRE** | **WEEKLY COURSE HOURS** |
| OT-212 | GRADUATION PROJECT | 4TH SEMESTRE | **T** | **A** | **C** | **ECTS** |
| **2** | **0** | **2** | **4** |
| **COURSE CONTENT** | Determination of the research topics on organic farming, Preparing and evaluating the projects in given topics. |
| **ELECTIVE COURSES** |
| **COURSE CODE** | **NAME OF THE COURSE** | **SEMESTRE** | **WEEKLY COURSE HOURS** |
| OT-214 | BEEKEEPING AND POLLINATION | 4TH SEMESTRE | **T** | **A** | **C** | **ECTS** |
| **3** | **0** | **3** | **5** |
| **COURSE CONTENT** | The Place of Organic Beekeeping in Agriculture and Turkish Economy, Organic Beekeeping Work in a Year, Tools and Materials Used in Organic Beekeeping, Bee Breeds, Nutrition and Nutrient Requirements in Adult Honey Bees, Natural Nutrition Sources for Honey Bees, Queen Bee Rearing, Bee Health. |
| **COURSE CODE** | **NAME OF THE COURSE** | **SEMESTRE** | **WEEKLY COURSE HOURS** |
| OT-216 | SAPLINGS AND SAPLING PRODUCTION | 4TH SEMESTRE | **T** | **A** | **C** | **ECTS** |
| **3** | **0** | **3** | **5** |
| **COURSE CONTENT** | Purpose and Importance of Sapling and Seedling Growing, Sapling and Seedling Environments and Characteristics, The Importance of Sapling and Seedling Growing, Sapling and Seedling Growing Techniques |
| **COURSE CODE** | **NAME OF THE COURSE** | **SEMESTRE** | **WEEKLY COURSE HOURS** |
| OT-218 | COMMERCIAL MUSHROOM CULTIVATION | 4TH SEMESTRE | **T** | **A** | **C** | **ECTS** |
| **3** | **0** | **3** | **5** |
| **COURSE CONTENT** | General Information on Commercial Mushroom (*Agaricus bisporis*), Mushroom Production in Turkey and in the World, the Place of Commercial Mushroom in biological Systematics, Nutritional Value of commercial mushroom, Mushroom Production Techniques (Compost Preparation, Pasteurization, Mushroom Micelle cultivation, Cover soil, etc.) Harvest and Other Cultural Processes. |
| **OSD** | COMMON ELECTIVE COURSES | 4TH SEMESTRE | **T** | **A** | **C** | **ECTS** |
| **3** | **0** | **3** | **5** |