

SIIRT UNIVERSITY
VOCATIONAL COLLEGE OF ERUH
ORGANIC AGRICULTURE PROGRAMME LESSON CONTENT

1. SEMESTER

ATA101 Ataturk's Principles and History of Revolution- I (2 + 0) 2

Atatürk's Principles and History of Revolution The aim of the course is to read and reforms concept, overview of the reasons that prepares the fall of the Ottoman Empire and the Turkish Revolution, OttomanDisintegration of the empire, Armistice Treaty, the situation of the country in the face of invasions and Mustafa Kemal Pasa, Samsun, the first step in the national struggle, organization and conventions path, National Forces and National Pact, Turkey opening of the Grand National Assembly of Turkey Grand National Assembly to address the management of the Independence War, Sakarya Victory to the national struggle, Sakarya War and great Attack, Mudanya to Lausanne, national struggle in education and culture, social and national struggle in the economic field .

TUR101 Turkish Language- I (2 + 0) 2

The language is the product of the human mind to comprehend, understand the structural features and the richness of Turkish language, to learn the ways of being successful in written expression, research, reading and information capabilities to develop.

ING101 English-I (2 + 0) 2

Markers, Prepositions, place, time, movement, singular and plural nouns , countable and uncountable nouns , time, tense , present tense , past tense structures, modes, will , should, should not , must, must not , can not , comparative constructions, pronouns , personal pronouns , possessive pronouns , adjectives, positive sentences , negative sentences and interrogative sentences, conjunctions, and, but .

ENF101 Basic Information Technology Usage (2 + 0) 2

Basic computer concepts, computer usage, word processing (Word) , spreadsheets (Excel), using data base (Access) , presentation (Power Point) , using information networks, internet, email, web page design.

MAT101 Mathematics (3 + 0) 3

Numbers (integers, real numbers, rational numbers) , exponential expressions, radical expressions, factorization, equations building and solving equations set up problems, units of measure and conversions, surfaces and volumes (triangle and the area of a rectangular prism of areas and volumes, pyramids area and volumes, tapered areas and volumes, areas, and volumes of the sphere) .

ORT101 Botanical (3 + 1) 4

Classification of botany, cytology (cell science: protoplasm, cytoplasm, cell membrane, nucleus, chromosomes, cell division and so on.) , Histology (tissue science: vacuoles, classification of tissue) , Organographies (roots, stems, leaves) , plant systematics reproduction in plants (asexual and sexual reproduction, the structure of flowers, ovule structure, symmetry in flowers, floral formulas and diagrams, flower situations, pollination, fertilization, fruit types) , growth and development physiology.

ORT103 The General Principles Of Organic Agriculture (3+ 0) 3

Overview of organic agriculture, the development of organic farming in the world and in our country, TC Ministry of Agriculture and Rural Affairs Organic Agriculture Act, the principles of organic agriculture and regulations for implementation .

ORT105 Agricultural Ecology (3 + 0) 3

The definition of ecology, evolution and scope of the ecosystem and its components, identification of plant ecology, the relationship with the environment of plants, plant competition between ecological conditions for plant growth, temperature, light, humidity, atmosphere, wind, water and impact, soil factors, biological factors and plant interactions with environmental pollution .

ORT107 Agricultural Meteorology (3+0) 3

The purpose and scope of agricultural meteorology, atmosphere, folds and composition, agricultural meteorology, climatology and agriculture, meteorological observations , climatic elements (air pressure, air pressure, wind, radiation, evapotranspiration and precipitation) Microclimatology and vegetal production Air masses, formation and climate of Turkey Affecting air masses.

ORT109 Sustainable Agriculture (3 + 0) 3

Definition of the concept of sustainable agriculture, objectives, development and issues, environmental sustainability, farms as ecosystems ; energy flow, water cycle, mineral cycle, bio- diversity, economic sustainability, social sustainability , adaptation of the principle ; soil fertility management, animal manures, cover crops and compost utilization, minimum tillage methods, soil and water conservation , crop rotation , ecological weed , disease and pest control , sustainable pasture management, integrated farming systems .

2.SEMESTER

ATA102 Principles of Atatürk and History of Revolution - II (2 + 0) 2

Liberation struggle, Sakarya War, the Great offensive, Republicanism and Caliphate from Mudanya to Lausanne, memorandum sükun democracy, nationalism, secularism principle, the agenda of Turkey.

TUR102 Turkish Language- II (2 + 0) 2

To know about the types of writing in daily life, to understand the importance of punctuation in written expression, the right to understand the importance of personal expression and communication, research, reading and applying the information capabilities.

ING102 English-II (2 + 0) 2

Once, present, present tense, past tense, future tense structures, modes, might, could, can, must, may, envelopes, location, direction , purpose, state adverbs, adjectives, as the title , the comparison is made superlative , passive structure , present , past and future tenses in passive voice, condition clauses, adjective clauses, transfer clauses, verb structures , to, -ing , noun clauses, adverb clauses , comparative structures .

MAT102 Mathematics (3 + 0) 3

Limit on number arrays and functions, some specific limits. Continuity in functions derivative and differential, trigonometry and trigonometric functions, Exponential function, Logarithm, Logarithmic functions, Hyperbolic functions-Derivative applications (Extremum, tangential normal equations, tangent normal lengths) Integral, Integral applications (area, volume, center of gravity, moment of inertia).

ORT102 Garden Plants Physiology (3 + 1) 4

Growth, vegetative and generative growth concepts, photosynthesis, respiration, water uptake and transport mechanism, nutrient uptake and transport mechanisms, internal and external factors affecting growth and development, the rest (of seeds, buds and other organs) , germination, and rooting, peak dominance, sterility and incompatibility, parthenocarpy and apomixis , flower and fruit abscission , maturation , aging, growth movements, resistance to cold and drought.

ORT104 Land Information (3+ 1) 4

Soil formation, soil classification, soil colloids; structure and practical importance, the physical properties of soil, soil water, chemical properties of soil, soil reaction, alkali and salt affected soils and management, soil organisms and ecology; soil organic matter, fertility management practices; soil N, P and K , and micro- nutrients, chemical contamination in the soil.

ORT106 Seedling and Sapling Production Technology (3+0) 3

Organic seedlings growing in importance of seedling breeding purpose and importance, seedling production environment and characteristics of leaf compost construction, seedling mortar mixtures, mortar preparation and disinfection, seedling pots, seedling nurseries, seed sowing, seedling growth and surprise, the use of grafted seedlings in the vegetable the importance and benefits of essential issues to be considered in immunization, the main vaccines used (cleft grafting, British whip grafting vaccine, flat -out, seat vaccine, tube vaccine etc.) and construction , maintenance of the seedlings (temperature, irrigation, fertilizers, pesticides) , ready seedling concept and modern seedling production facilities. Evaluation of seedling technique as organic farming , seeds, rolling, dipping and tissue culture Introducing the production techniques and production purposes, characteristics of breeding plants will be taken of production material and maintenance conditions, rootstocks and production, the rootstocks are used according to the type of fruit, grafted and non-grafted seedlings

production, defining a healthy seedlings, saplings of classification and certification, storage of seedlings . Virus -free seedling production (citrus, etc.).

ORT108 Seed Technology (3 + 0) 3

Seed concept in our country, seed production and supply, foreign and self- fertilization, heterozygous and homozygous seeds, pollen contamination sources, isolation, seeds produced by plant species, seed production, factors affecting production, planning of seed production, physical and biological properties of the seeds, affecting germination and accelerating factors (rest , coating, priming , etc .) , harvest seeds, sorting, packaging, labeling, storage, seed classes, certification systems, seed law, franchising system, the F1 hybrid seed and production .

ORT110 Landscape and Ornamental Plants (3+0) 3

Classification of ornamental plants, cultivation desires, techniques and introduction of all stages of production, landscape arrangement.

3. SEMESTER

ORT201 Organic Vegetable (2 + 1) 3

The definition of organic vegetables, classification, the importance of organic food and human health, vegetables, world and organic vegetable production in Turkey, organic vegetable according to the Agricultural regions, ecological factors in vegetable cultivation, flower structure and replication techniques seen in vegetables, organic vegetable garden plant, production techniques (the concept of planting density, sowing , planting , etc .) cultural operations carried out in organic vegetables (tillage, fertilization, irrigation, harvest).

ORT203 Field Crops (3 + 0) 3

Arable farming systems, classification of field crops, land use and land classes in Turkey, the economic importance of field crops, biological characteristics of field crops, adaptation (climate, temperature, rainfall, light and soil requirements) , grain entering the field crops context, legumes, industrial, fodder etc. the introduction of cultivars, breeding (obtained seeds, preparation of planting area, planting and maintenance of criteria defining the -dik time) , harvesting and storage.

ORT205 Protected Cultivation (2 + 1) 3

Overall greenhouse: low plastic tunnels, greenhouses and greenhouse definition, Turkey and the World greenhouses, Classification of greenhouses, greenhouse site selection acting on and greenhouse institutions should be careful about factors in the greenhouse air conditioning arrangement, prepare the soil in the greenhouse. Special greenhouses: cultivation in our country made tomato, pepper, eggplant, cucumber, beans, melons and lettuce species breeding in the greenhouse .

ORT207 Agricultural Structures and Irrigation Techniques (3 + 0) 3

Identification and properties of water. important soil physical properties and soil moisture constants are important in terms of irrigation. Irrigation water resources, the characteristics of irrigation water, irrigation methods (pan, furrow, drip and sprinkler irrigation) , monitoring techniques based on soil in determining the time of irrigation (gravimetric method, tensiometer, neutron gauge, capacitance sensors) and plant -based monitoring techniques; Symptoms can be seen, the pressure chamber technique.

ORT209 Plant Disease and Struggle (2 + 1) 3

Plant disease agents (fungi, bacteria, viruses, mycoplasma -like organisms, rickettsia -like organisms and Spiroplasma SMEs) in terms of symptomatology, the etiology, pathology, to be applied against factor epidemiology and plant diseases hygiene and therapy methods, plant my symptom of abiotic diseases, diagnosis, prevention and control methods classification of weeds, biology, damage and proper fighting techniques and medications to organic agriculture.

ORT213 Agricultural Publication and Communication (3 + 0) 3

The concept of agricultural publication, its definition and aims; agricultural publication in Turkey and in the world; the role of publication in agricultural development; principles of agricultural publication, methods of publication; publication of agricultural business; research of farming systems; case studies.

ORT215 Agricultural Economy (3 + 0) 3

The definition of agriculture and agricultural economics, agricultural activities and properties, contribute to the economy of agriculture, manufacturing and production factors, income and cost concepts, the transition to the profit and determination of production capacity, input-output relationship and the production function, factor between substitution relations, economic principles in

taking production decisions and implementation of agricultural systems and the factors that determine the crops to be grown , the economic optimum use of inputs , Law of Diminishing Returns , evaluation of the results of the annual agricultural enterprises , agricultural policy and EU harmonization of Turkish agriculture , structural issues and regulations of Turkish agriculture.

ORT217 Organic Mushroom Production (3 + 0) 3

Cultivated mushrooms (*Agaricus bisporus*) characteristics of farming ,composting ,micelles planting , cover the product term soil series my care irrigation and climate characteristics, evaluation of fungi collected from nature , the implementation of mushroom production of organic farming principles.

4. SEMESTER

ORT202 Marketing of Organic Products, Storage and Packaging (3 + 0) 3

The definition and scope of agricultural marketing, the importance of the economic development of agricultural marketing, general characteristics of marketing in terms of agricultural products, demand and supply, the main and auxiliary functions of agricultural marketing , organic products marketing channels and features, the importance of price as a marketing decision variables , properties of organic product prices and pricing strategies , the contribution of agricultural marketing to economic development and its problems. Glass and glass packaging, metal materials and metal packaging, plastics and plastic packaging, paper and paper packaging, transport packaging, packaging of organik agricultural products; Definition and historical development of conservation, physical, chemical and biological preservation methods of products, conservation methods, biological structures of major products, respiration and metabolism concepts.

ORT204 Medicinal Aromatic Plants (2 + 1) 3

Medical and history and importance of aromatic plants, and grouping, medical and ecological requirements of aromatic plants , medicinal and aromatic plants of the culture and the basic principles of drying and storage , utilization of medicinal and aromatic plants.

ORT206 Organic Fruit (2 + 1) 3

Fruit of the definition, the importance of the direction of Turkey's growing fruit and place in organic fruit growing economies, according to the type of fruit fruit characteristics and climatic classification, general biological properties of the fruit, the overall ecological requirements and problems of fruit

species. flower bud formation in fruit trees, and the factors affecting the formation of important physiological events in fruit production. fruit abscission and periodicity, ecological conditions and the relationship with cultural processes and measures that can be taken in accordance with organic fruit. harvest and harvest criteria, transportation of fruit, classification and storage, the species raised in private fruit and our country.

ORT208 Plant Pests And Struggle (2 + 1) 3

The animal organism causing damage in crop production (insects, mites, nematodes, mollusks, rodents and birds, etc.). Where the systematics, morphology, reproduction and development, life cycle , the damage they have caused in the plant forms and manifestations, the economic importance of pests , plant organic against harmful control methods and techniques.

ORT210 Plant Nutrition and Fertilization (3 + 1) 4

Plant nutrients are absolutely necessary for the development, definition and classification, essential macro and micro nutrient deficiency and excess of damages in malaria occurring in plants. Gaining soil nutrients in organic agriculture, organic fertilizers; manure, compost, green fertilizers, humic substances, microbial fertilizers, agricultural use of the urban waste regulations regarding the substance to be used in fertilizer and soil improvement. Inorganic fertilizer, fertilizer application methods and forms.

ORT212 Organic Viticulture (3 + 0) 3

Classification of grapes, its place in the national economy, major varieties, suitable varieties for organic agriculture, morphology, ecological requirements, propagation, cultivation, cultural practices for grape production in organic farming, harvesting and evaluation forms (vinegar organic grapes, fruit pulp, molasses and so on. Evaluation forms) .

ORT214 Meadow Pasture and Forage Crops (3+0) 3

Meadow and pasture cultures, definition and importance, meadow pasture and herbaceous plants in Turkey and the world, meadow pasture and the importance of forage plants, problems of meadow pastures and forage crops and their solutions, weed struggle in meadow and fertilization in meadow pasture and forage crops, pasture law and developments.

ORT216 Agricultural Project Preparation and Evaluation (3+0) 3

Students are given a research topic. Students scan or practice literature on this subject and obtained the information or the results of the application compiled in accordance with the rules of writing theses and deliver advisors.