

**SIIRT UNIVERSITY**  
**VOCATIONAL COLLEGE OF ERUH**  
**DAIRY AND PRODUCTS TECHNOLOGY PROGRAMME LESSON**  
**CONTENT**

**TUR101 Turkish Language I (2+0) 2**

The language, to understand that it is the product of the human mind, to understand the structural features and the richness of Turkish language, understand the ways of being successful in written expression, research is aiming to apply the reading and information capabilities.

**TUR102 Turkish LanguageII (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, aims to teach reading and the ability to apply information capabilities. To students in course content, what the written language and writing to be able to recognize that, written and oral expression types (creative writing, prepared to write tutorials, impromptu speech) planning of writing, short story writing (short story writing identified issues with the main lines, a chain of events giving the first pieces of short story writing, creating intellectual short articles (article, essay writing), describes

**TAR-101 Principles Of Ataturk And The History – I (2+0)2**

Basically modern Turkey's emergence and development to be taught based course: the Kemalist Thought System, the Republic of Turkey about the History of Turkey and the Kemalist Thought System applications on the threat to give accurate information; Turkish youth, country, nation and state and the indivisible integrity of the Kemalist thought System in accordance with the train, empower and unite around national goals; rational, modern, honorable, hard-working, homeland and nation, full of love, tolerance and humanistic ideas formed to educate individuals with a personality.

**TAR102 Principles Of Ataturk And The History – I I(2+0) 2**

First semester is given in the continuation of Ataturk's Principles and History of Turkish Revolution II. Course content also given in the first semester have been described in the context of Ataturk's Principles and History of Turkish Revolution II.

**TAR101 Foreign Language (English) - I (4+0) 5**

I taught in the first semester are given in English as a Foreign Language. To understand correctly the teaching of foreign languages, is aiming to read and speak.

**YAD102 Foreign Language (English) - II (4+0) 5**

I taught in the first semester are given in English as a Foreign Language. To understand correctly the teaching of foreign languages, is aiming to read and speak. A brief repetition of important structures taught in the first semester is done according to the level of students when necessary. English language structure given, better consolidate purpose from various sources in the field of dialogue with the students, paragraphs, tables, diagrams, etc. can be performed on these selected examples of work. Speech, using correct pronunciation and intonation with teachings of the structures are given in appropriate environments.

**BİL-101 Computer (1+1)2**

The objectives of this course is to provide information on personal computers, windows operating system and office software applications and improve the computer skills of the students

**FİZ101 physics (2+0) 2**

The student, the basic laws of physics grip to fit the training in advanced stages, recognition of materials and conduct experiments, materials, structural, mechanical, fluid, wave propagation, electricity and basic rules of magnetism clutch, laboratory identification variables in the study, graphics aims to develop drawing and analysis skills . A large part of the concepts covered in this course will consist of materials and physics at the basic level.

**EST101 Mechanical Drawing (1+2) 2**

Introduction of technical drawing and tools, introduction of standard drawing tools and materials, standard image leaves, standard font, standard lines, line drawing, geometric drawings, drawing rules, to complete the look, sectional views.

**EST104 Safety and First Aid (1+0) 1**

Courses to students, staff work conditions related to the provision of security problems they might encounter in the business environment and aims to provide first aid to be applied in any accident.

**EST105 General Chemistry (2+2) 3**

Course content, the materials, the structure of atoms (atoms, electrons, protons, neutrons) Explanation of the concept, basic chemistry concepts and formulas, solution concepts, features, definitions and types of chemical solutions, chemical equations and quantitative relations, chemical reactions: acid-base reactions, redox reactions, chemical sources, calculations, gases, liquids, solids, pH concept, acids, bases and salts, chemical equilibrium, solubility equilibria, chemical reactions, chemical bonds (ionic, covalent and metallic bonds), the structure of organic matter, features, moles, molarity, normality concept, concentration, constitute composition concepts.

**EST106 Laboratory Technique (2+2) 5**

The aim of the course, students will graduate from the program, laboratory and to have information about laboratory safety, chemicals they use learning, learning the methods of preparing the solution will be used in the analysis and the tools they use is to provide recognition devices and equipment.

**EST107 Basic Principles of Food Science (2+0) 2**

Course aims to provide students with information about the food industry and the operation will be in the future workspaces. The content of the course, the definition of food science, the activities of the food industry, sub-sectors, basic operations and features are implemented according to the nature of the product being processed in the food industry, the factors that cause them to loss of deterioration of the nutritional value of food, control, prevention methods of these factors is located in the differences between the methods .

**EST108 Drinking Milk Technology (2+2) 4**

Food Codex definition and characteristics of the raw milk of the drinking milk to be processed into drinking milk, pasteurization and sterilization norms, pasteurization and sterilization process steps, drinking milk considerations to be taken into account in the establishment of the factory, raw milk and drinking milk are analyzed.

**EST109 Mathematics (2+0) 2**

Students, number, number of clusters and their use in solving problems defined process, the thought put into comparison-scheme as grip and is intended to apply the knowledge on the calculation of economic issues that are a part of everyday life. The main topics of the course; numbers, ratio and proportion, algebra, functions, logarithms, form concepts such as complex numbers and equations and inequalities.

**EST111 Vocational Mathematics I (2+0)3**

Developing societies to train individuals with a problem-solving skills they need inevitable and individuals, using mathematical language by winning the ability to use mathematical symbols and the written and oral communication, in a subsequent period of their lives, gain the knowledge and experience will be used in occupations based on mathematics, do their profession acquire the necessary infrastructure is to help.

**EST112 Basic Calculation Techniques (1+0) 1**

Students formulate mass and energy balances in the various business units and conditions and the provision of technical analysis, to understand the problems of students with a variety of problems, aims to establish and gain the ability to apply it on real processes. Thus, the students apply their knowledge of mass and energy balances during the processing of a product is aimed to make a level to evaluate.

**EST113 Laboratory Technique (2+1)5**

Students will graduate from the program, laboratory and to have information about laboratory safety, chemicals they use learning, learning the process for the preparation of the solution will be used in the analysis and the tools they use is to provide the recognition of the device and the equipment.

**EST114 Vocational Mathematics II (2+0)3**

He topics covered in the course effectively teach students the necessary and sufficient to create the mathematical basis for a better understanding of mathematical topics in vocational courses and learning about the profession to make use of mathematical topics.

**EST115 Hygiene And Sanitation (1+1) 4**

Cleaning and disinfection definition cleaning and disinfecting materials, the tools and equipment used in dairy cleaning and disinfection requirements, may occur in dairies dirt and surface to be cleaned, milk cleaning and water features used in the disinfection of operation, wear and protection during cleaning and disinfection in the dairy business, some cleaning and the combination of disinfectants, cleaning agents control and selection of concentrations of disinfection disinfection construction of I, disinfection disinfection construction II, milk cleanliness of the establishment of the air of the milk business, maintaining the business of cleaning and disinfectant, cleaning and classification according to the intended use of dezenfektea the material, cleaning the dairy industry.

**EST116 Dairy Microbiology (3+0) 3**

Introduction to Dairy microbiology, history of dairy microbiology, the relationship between milk composition and microbial structure, important microorganisms for dairy microbiology, pathology dairy products, the importance of the use of starter cultures.

**EST117 Microbiology (2+3) 6**

Introduction to Microbiology, terminology, classification, general characteristics and the importance of food microbiology of these microorganisms groups of microorganisms, microbial metabolism, microbial growth, control of microorganisms, immunity, is the basic content of the genetic structure and mutation course.

**EST118 Milk And Concentrated Dairy Products Technology (2+1)4**

This course provides students with the Turkish Food Codex and TS in accordance with the standards of drinking milk, condensed and dried milk products are aimed to gain qualifications to the production

**EST119 first aid (2+0)3**

The basic principles of first aid, basic life support, first aid injuries, fractures, dislocations and sprains first aid, first aid and proper patient handling techniques aimed to gain qualifications in medical emergencies related.

### **EST120 Analyses Of Raw Milk (1+1)3**

With this course students; accordance with the regulations and methods of analysis of milk and take samples of the product to be processed to determine the suitability of raw milk, making milk analyze / evaluate and aimed to gain the qualification.

### **EST122 Basic Operations in milk Business (2+1)4**

This course provides students with the Turkish Food Codex and TS in accordance with the standards of milk Adoption of raw and auxiliary materials to do business, Front Operations for Milk and Milk Products are aimed to gain qualifications to do.

### **EST124 Information and Communication Technology (2+1)4**

Students basic computer hardware and the operating system to recognize the unit, using them to have information about the use of the internet and office programs on the computer document is to provide spreadsheets and presentations.

### **EST200 Fermente Dairy Technology I I (2+1) 4**

Fermented dairy products processing technology and provide solutions to problems that might be encountered on fermented milk products.

### **EST201 Fermente Dairy Technology I (2+1) 4**

This course provides students with the Turkish Food Codex and TS in accordance with the standard whey powder production, the resulting lactose from whey, whey beverages obtained from the protein obtained and whey that of water is aimed to gain qualifications. Includes milk and evaluation of residues formed during the production of milk and the production of other new products

### **EST203 Butter Technology (1+1) 3**

The definition and classification of butter, butter traditional and continuous production methods constitute the content of the course

### **EST204 Special Dairy Products (2+0)3**

Turkish Food Codex and Reinforced Milk Production in accordance with TSE standards, the production of recombined milk products, imitation and substitution Dairy basic knowledge and skills related to production and milk protein products are gained.

### **EST205 Cheese Technology (2+2) 5**

The definition of cheese, classification, cheese production method, CUG milk characteristics, the analysis made in raw milk, pasteurization, refrigeration, fermentation, yeast strength, determination of clot cutting maturity, clot cutting, stamping, molding, clot boiled, salting, cheese ripening, yield

### **EST206 Food Additives (2+0) 3**

The definition of food additives and related regulations, according to the Turkish food legislation; food use of additives, labeling and purity criteria, classification of food additives, food additives, which are important in the food industry, the excipients used in dairy technology gastric origin of animal enzymes, liquid yeast technology, powdered yeast, plant-derived enzymes and microbial enzymes in milk products cultural use, food and micro-organisms used in the dairy industry, the basic functions used with the name of the bacteria, the importance of salt, packing materials, functions and attributes related to the production of milk and storage, functions and attributes related to the protection of consumer rights.

### **EST207 Ice Creame Technology (1+1) 3**

Classification of ice cream and similar products, description and content, freeze basic ingredients used in the technology mix accounts, ice musk of pasteurization and homogenization, refining, storage, freezer types and ouerr formation, ice cream hardening and constitute the content of the course the factors affecting it.

### **EST208 Business Management (3+0)3**

Student and worklife with people who are developing those who wish to have information about it and the basic rules of modern business in a globalized world in accordance with the theoretical and practical terms the country and the world. The business management course content, objectives and types, constitute financial audit and tables.

### **EST209 Analyses Of Dairy Products (2+2)4**

Implementation of the necessary analysis for the production of high quality dairy products and to have information on the detection results. Determination of milk quality suitable to the course content, technological process, can be determined in a short period of fraudulent and

diseased milk, necessary for the production of high quality dairy products sensory, physical, and the determination of the chemical analysis.

#### **EST210 Traditional Cheese Technology (2+1)4**

His course provides students with the Turkish Food Codex and Feta Cheese in accordance with TSE standards are aimed to gain qualifications Cheese Production. This course describes how to produce at industrial level and construction of local produced cheese

#### **EST211 Food industry machinery (3+0)4**

Food is intended to enhance the experience of students from mentioning widely used in machinery and equipment industry.

#### **EST212 Packaging in Dairy Technology (2+0) 2**

Packaging material (glass-based, paper-based, metal-based), the test methods used in packaging materials, milk and dairy products, meat and meat products is the packaging of the content of the course.

#### **EST213 Food Quality Control and Standards -I (3+0) 3**

Quality, quality control, total quality control, total quality management concepts, ISO 9000 standards, the functions of the quality control department and other departments relations with the general principles of food quality control, food control systems applied in industry, hazard analysis critical points, appropriate technology requirements, food classification and analysis of the sensory-physical-chemical and instrumental methods of the quality characteristic of the course content.

#### **EST214 Dairy Plant Establishment and Organization (3+0)4**

Site selection for students to business buildings, preliminary studies, planning / development, building construction and design, equipment and hardware, operation of the plant, production processes, to provide basic knowledge and skills of effective use of cleaning and maintenance and operating units. This course will build a simple building as milk plant, equipment selection and installation, provide information about the production process of the various milk products.

**EST215 Dairy Farming (2+0)4**

This course provides students with the dairy cattle, it is aimed to gain qualifications to the sheep and goat enterprise.

**EST216 Communication (2+0)2**

This course introduces basic principles and skills between people's communication and deliberation purposes. Interpersonal, small group, institutional, examines the major concepts as an introduction to the public and mass media. The purpose of this course is that students gain a general perspective and advanced an idea about the overall communication and interpersonal discourse theory to understand the main principles and practices of communication. The importance of basic communication in public relations in the course will be highlighted.

**EST218 Professional Ethics (2+0)2**

This course is aimed to gain competencies related to professional ethics. In this course, explaining the basic principles of professional ethics and values of social responsibility in public relations is aimed to examine the various applications axis

**EST107-1516 Statistics (2+0)2**

Identification of statistical concepts and skills to gain the overall statistics. Both in business, as well as various organizations in taking the best decisions for the needs of employees have heard that the data collected can, with the ability to gain the storing and processing.