#### **COURSE CONTENTS**

#### 1st YEAR-I.SEMESTER FALL TERM

#### **COMPULSORY COURSES**

#### INGL 101 English I (2-0-0-2) (AKTS:2)

The ""English File Elementary Student's Book"" improves communication skills and English knowledge by enabling the person to communicate more confidently and effectively by gaining basic language skills. The twelve units in the book cover basic English vocabulary, grammar, speaking and listening. It takes English from the beginner level and makes the lesson relevant and motivating with pictures and rich exercises. The book is supported by external worksheets. Students are expected to improve their basic English skills by participating in class and classroom discussions. At the end of this course, students will have achieved the following learning outcomes.

# TURK 101 Turkish Language I (2-0-0-2) (AKTS:2)

Basic grammar rules, word types, tenses and time appropriateness in expression. World language groups. The place of Turkish among world language groups. Oral and written expression forms. Spelling, punctuation and spelling rules. Correct sentence making, sentence analysis.

## HIST 101 Ataturk's Principles and History of Revolution I (2-0-0-2) (AKTS:2)

Students French Revolution and the Industrial Revolution, beginning with the process of change that took place in Turkey, developments and significant events are transferred in the context of global developments.

#### BES 117 Physiology I (3-0-0-3) (AKTS:6)

This course; introduction to physiology, cell physiology, blood cells and their functions, muscular system physiology, circula-tory system physiology, immune and respiratory system physiology, digestive system physiology, excretory system physiology, endocrine system physiology, central nervous system physiology peripheral nervous system and reflex, sensory system physiology addresses the issues.

## BES 119 Anatomy (2-1-0-4) (AKTS:6)

Description of medical language terminology, morphology of all body systems, functions of body systems.

## BES 127 Basic Chemistry and Laboratory Practice I (2-0-3-4) (AKTS:6)

Properties and measurement of matter, atoms and atomic theory, chemical compounds, chemical reactions, introduction to aqueous solution reactions, gases, electron structure of the atom, periodic table and some atomic properties, chemical bond, bond theories.

## **AREA ELECTIVE COURSES**

## BES 107 Basic Psychology (2-0-0-2) (AKTS:3)

Historical development of psychology, research methods in psychology, sensation and perception, consciousness, learning, cognition, language, lifelong development, motivation, stress, emotions,

social psychology, personality theories and psychological disorders, scientific psychology concepts, methods and theories.

# BES 123 Basic Concepts in Nutrition and Dietetics (2-0-0-2) (AKTS:3)

Balanced diet, Macro/Micro nutrients, Meal Plan, Food groups, Daily requirements, bioavailability, energy requirements, the term of metabolism, the term of nutritional status; obesity, ideal body weight, food fortification, vegetarianism; salt and sugar; Nutrition education and counseling concepts.

# BES 125 Turkish Culinary Culture (2-0-0-2) (AKTS:3)

This course; Turkish culinary culture and history, Turkish cuisine specific food and beverages, preparation cooking methods and tools used, table setting, traditional and regional/local food processing and storage practices in Turkish cuisine, Central Anatolia region cuisine culture and practices, Eastern Anatolia region cuisine culture and practices, Southeastern Anatolia region cuisine culture and practices, Aegean Region cuisine culture and practices, Mediterranean Region cuisine culture and practices, Marmara Region culinary culture and practices, Presentations, Turkish culinary culture and practices in special days and events. practices, Turkish cuisine in Ramadan, individual suggestions, Turkish cuisine in Ramadan, individual suggestions; includes topics.

## BES 129 Nutrition and Ecology (2-0-0-2) (AKTS:3)

This course includes the study of nutritional ecology, environment and related issues.

## I.YEAR-II.SEMESTER SPRING TERM

#### **COMPULSORY COURSES**

# TURK 102 Turkish Language II (2-0-0-2) (AKTS:2)

Phonetics and morphology of Turkish language, historical development of Turkish, presentation and effective speaking tech-niques, oral and written literary genres, spelling-punctuation marks; presentation, poetry, essay, composition, story, newspaper, magazine studies and applications.

## HIST 102 Ataturk's Principles and History of Revolution II (2-0-0-2) (AKTS:2)

Classification, description, explanation, analysis on the solution of contemporary problems at the level of society, individual and country by adapting and adapting this idea to national principles within the framework of the founding basic principles of the Republic of Turkey and the Turkish Revolution, within the norms of reason and science, modernity, from the student who took the HIST 102 course. aimed at gaining the ability.

## INGL 102 English II (2-0-0-2) (AKTS:2)

It is covered on the basis of levels of general English teaching. Grammar rules are chosen and taught among the structures that students will need most in daily use. Students unconsciously learn grammar rules from basic reading passages and example sentences. Grammar rules are reinforced with the help of communicative activities. Past tense, future tense, some patterns ("must", "can", "too" and "either"), adjectives, adverbs, past tense with regular and ir-regular verbs, question patterns, body parts, diseases, our emotions, office tools word aiming to gain knowledge.

### BES 118 Physiology II (3-0-0-3) (AKTS:6)

This course; introduction to physiology, cell physiology, blood cells and their functions, muscular system physiology, circulatory system physiology, immune and respiratory system physiology, digestive system physiology, excretory system physiology, endocrine system physiology, central nervous system physiology peripheral nervous system and reflex, sensory system physiology addresses the issues.

# BES 128 Basic Chemistry and Laboratory Practice II (2-0-3-4) (AKTS:6)

Organic Compounds, Structures and Isomers and Organic Chemical Reactions.

# BES 122 Occupational Health and Safety (2-0-0-2) (AKTS:3)

#### BES 112 Communication Skills (2-0-0-2) (AKTS:3)

Basic ethical principles; national and international laws and rules related to the dietitian's duties and responsibilities; Giving information about the importance of teamwork in nutrition and dietetics, the experience and rules of different communication methods to be established with patients in different patient groups.

#### **AREA ELECTIVE COURSES**

## BES 136 Medical Biology and Genetics (2-0-0-2) (AKTS:3)

System of living things, biomolecules, cell structure and functions, energy metabolism, quality of genetic material, DNA packaging and structure of chromosome, RNA structure, synthesis and function, genetic code and protein synthesis, basic principles of heredity and Mendelian inheritance in single gene diseases in humans, cell cycle and cell division, mutation, nutritional genes and importance of biotechnological products.

# BES 134 General Economics (2-0-0-2) (AKTS:3)

It is a course that covers the subjects of being able to define and evaluate basic economic concepts, theories and methods, To be able to define and comment on economic systems, decision mechanisms, policies and problems, to offer basic policy sug-gestions in the face of economic problems, to apply mathematical, statistical and econometric analysis tools to economic problems.

## BES 108 World Cuisine (2-0-0-2) (AKTS:3)

Food and culture, historical development of cuisine, general characteristics of Turkish cuisine, Turkish traditional foods and health interaction, cuisines of the Americas, Asia, Europe and Africa, and the effects of beverages on culture.

## BES 126 First Aid (2-0-0-2) (AKTS:3)

Structure and functioning of the human body, Basic life functions, Basic concepts in first aid and the importance of these concepts in practice, Crime scene, crime scene case type evaluation, Precautions to be taken according to the type of case before emergency intervention, Emergency case assessment, Basic life support, Basic life support Topics to be applied, Injuries, wound care Interventions to be done first during wound care. Bleeding, Interventions to be done first about bleeding. Fractures, dislocations, sprains and injuries and the first interventions, Heat-related problems, first interventions to be done in heat-related problems, Poisoning, Consciousness disorders, Drowning, foreign objects, first interventions to be done in related problems. They have information about carrying techniques, wrapping techniques, what needs to be done about the first aid kit.

#### **II.st YEAR-III.SEMESTER FALL TERM**

#### **COMPULSORY COURSES**

#### BES 201 Nutritional Biochemistry I (3-0-0-3) (AKTS:5)

Examination of the functions of CHO, protein, fats and vitamins in the body, their metabolism, biochemical changes in deficiency and ex-cess conditions.

### BES 231 Food Chemistry and Analysis Applications I (2-0-3-4) (AKTS:6)

Solutions and colloid systems; structure, classification, chemical and functional properties of carbohydrates, proteins and fats; structure of enzymes, their classification, their presence in foods and their use in the food industry; properties and functions of pigments and flavor and odor components.

## BES 209 General Microbiology (2-0-0-2) (AKTS:4)

Basic microbiology and basic immunology.

# BES 205 Nutrition Principles and Practice I (3-0-3-5) (AKTS:6)

Understanding general nutrition principles, importance of carbohydrates, proteins and lipids in healthy nutrition, chemical structure, properties, classification, functions, sources, daily intake recommendations, excessive intake. Individual food consumption records and physical activity.

# EHP 201 English for Health Professionals I (3-0-0-3) (AKTS:3)

#### **AREA ELECTIVE COURSES**

## BES 211 Demographics and Health (2-0-0-2) (AKTS:3)

Introduction to public health, concept of public health, disease and health, criteria determining the level of health, epidemiological research methods, demographic-population structure, health management, maternal health, family planning, health education, immunization, environmental health, occupational health

## BES 213 Nutrition in Disasters (2-0-0-2) (AKTS:3)

What is a disaster?, Ensuring food security and safety in the management of pre-disaster, disaster and post-disaster nutritional status, Defining nutritional status and problems, Nutrition programs according to age, gender and physiological status characteristics (breastfeeding, complementary foods, nutrition during pregnancy), Collective Establishment, implementation, monitoring, evaluation of nutrition systems, Basic principles in the development and implementation of appropriate training programs.

## NON AREA ELECTIVE COURSE (2-0-0-2) (AKTS:3)

#### II.YEAR-IV.SEMESTER SPRING TERM

#### **COMPULSORY COURSES**

### BES 222 Nutritional Biochemistry II (3-0-0-3) (AKTS:4)

Examination of the functions of water and electrolytes, minerals and hormones in the body, their metabolism, biochemical changes in deficiency and excess states, as well as metabolic changes in hunger and satiety.

## BES 232 Food Chemistry and Analysis Applications II (2-0-3-4) (AKTS:6)

Subjective and objective methods used in the evaluation of food quality and nutritional quality, milk and dairy products, meat and products, eggs, cereals, tea, coffee, etc. compositions, functional and structural properties of foods and beverages, bioactive nutritional components and functional nutrients.

#### BES 206 Nutrition Principles and Practice II (3-0-3-5) (AKTS:6)

Functions and requirements of water and micronutrients, diseases/disorders caused by insufficient or excessive intake; food preparation and cooking methods and food groups It is an application-oriented course designed to provide basic information about the structural properties of foods, functions related to preparation and cooking, healthy and safe processing methods that will preserve their nutritional value and quality. In this course, the structural and functional properties of foods and beverages from different food groups are explained, the preparation, cooking and processing methods of these properties in the kitchen and food industry.

#### BES 224 Food Microbiology and Food Safety (2-0-3-4) (AKTS:5)

Survival and death of microorganisms, biosecurity, spoilage of meat, poultry and seafood, spoilage of milk and dairy products, spoilage of vegetables and fruits, spoilage of nuts and grains, foodborne pathogenic bacteria, foodborne viral pathogens and prions, food and waterborne parasites, toxigenic fungi, epidemiology of foodborne diseases, advanced techniques in food microbiology.

EHP 202 English for Health Professionals II (3-0-0-3) (AKTS:3)

## **AREA ELECTIVE COURSES**

BES 212 Pathophysiology of Diseases (2-0-0-2) (AKTS:3)

This course; Energy balance and body weight; obesity, pathophysiology of eating disorders, pathophysiology of hematological system diseases, pathophysiology of musculoskeletal system diseases, pathophysiology of cardiovascular system diseases, pathophysiology of cardiovascular system diseases, pathophysiology of endocrine system diseases, gastrointestinal system diseases pathophysiology, Pathophysiology of liver, gallbladder and pancreas diseases, Pathophysiology of oncological diseases, Pathophysiology of metabolic stress diseases, Pathophysiology of infectious diseases; includes topics.

## BES 218 Professional Orientation (2-0-0-2) (AKTS:3)

It includes the introduction of the Department of Nutrition and Dietetics and its departments, the concepts of professional ethics and deontology, curricula, student responsibilities and regulations, the profession of dietitian, good professional practices, professional organizations, the history of the profession and access to professional resources.

#### **FACULTY COMMON ELECTIVE COURSES**

SBF 102 Reproductive and Sexual Health (2-0-0-2) (AKTS:3)

## SBF 110 Social Responsibility Projects (2-0-0-2) (AKTS:3)

The course includes the basic concepts of social responsibility, the stages of developing and realizing a social responsibility project.

## **III.st YEAR-V.SEMESTER FALL TERM**

## **COMPULSORY COURSES**

## BES 301 Determination of Nutritional Status in the Community (3-0-0-3) (AKTS:5)

Methods for determining nutritional status, anthropometric measurements, clinical symptoms, biochemical and, biophysical methods, food consumption studies, indirect methods (health statistics; age-specific mortality and morbidity rates, etc., ecological factors, nutritional status screening tests/tools, application of anthropometric measurements, application of individual food consumption research.

# BES 303 Collective Nutrition Systems I (3-0-0-3) (AKTS:5)

This course; Definition of Mass Nutrition/TBYK, its features TBS systems, new production systems. Management and Organization in Mass Nutrition Systems, Strategic Management and Quality Improvement Strategies in Mass Nutrition Systems., Human Resources Management in TBS, Organization of TB employees, Job Descriptions, Physical Conditions in TBS, Kitchen and Dining Hall Equipment, Tools and Equipment Used in Mass Nutrition Systems, New Technology, Menu Management and Control I, Menu Management and Control II, Standard Food Tariffs, Reasons for Residues in TBS and Ways of Prevention, Purchasing Techniques, Storage Principles, Occupational Safety in Mass Nutrition Systems; includes topics.

## BES 305 Mother and Child Nutrition (3-2-0-4) (AKTS:6)

Child Nutrition in Turkey and in the World and Overview of Problems, Pregnancy physiology, problems, needs and nutrition, Lactation physiology, problems and requirements, Breast milk and its characteristics, breast milk applications during lactation, characteristics and requirements of 0-1 year old children, supplementary foods, baby foods and properties for 0-1 year old children, Nutrition and mental development, Preschool and school age child nutrition, adolescent nutrition, growth monitoring in all age groups.

## BES 307 Diet Therapy and Applications in Diseases I (3-2-0-4) (AKTS:6)

Obesity, Weakness, A.Nervosa, B. Nervosa, Diabetes Mellitus-Fonk. Reak. Hypoglycemia, Metabolic Syndrome, Cardiovascular Diseases, Hypertension, Gastrointestinal System Diseases, Enteral-parenteral Nutrition, Fiber and its interaction with health.

## **KPL 101 Career planning (1-0-0-1) (AKTS:2)**

#### **AREA ELECTIVE COURSES**

## BES 309 Food Control and Legislation (2-0-0-2) (AKTS:3)

It is a course that includes evaluating foods in terms of current control methods, legislation and legal regulations.

#### **BES 311 Sports Nutrition (2-0-0-2) (AKTS:3)**

"This course; Definition of Nutrition in Sports and Exercise, Who is a Sports Dietitian?, Energy metabolism in exercise and sports, Energy sources in athlete diets, Other nutritional sources in athlete diets, Performance nutrition, Evaluation of nutritional status of athletes, Training and nutrition, Importance of extreme training and nutrition in sports. Nutrition during the competition or match, Nutrition during the recovery period after the competition or the match, Immune system and nutrition in sports, The effects of different environmental and living conditions on performance and nutrition strategies in athletes, Eating disorders and body image in athletes, Dietary Supplements in Athletes.

## BES 313 Drug Interaction with Food and Nutrient (2-0-0-2) (AKTS:3)

This course; General introduction, Nutritional drug metabolism, Nutrient-Drug Interactions, Drug intake and carbohydrate interaction, Drug intake and protein interaction, Drug intake and lipid interaction, Interactive discussion of a relevant case, Interactive discussion of a relevant case, Drug intake and vitamin interaction, Drug intake and mineral interaction, Alcohol, tea, coffee-drug interaction, Importance of drug groups and food, nutrient interactions, Presenting and interactively discussing a relevant current article, Presenting a relevant current article and interactively discussing; includes topics.

# BES 315 Nutritional Status Screening Tests (2-0-0-2) (AKTS:3)

This course; Importance of screening nutritional status, Nutritional deficiencies, Characteristics of screening tests (Reliability and validity), Determination of the appropriate screening test, Planning the

application, Screening of nutritional status in children and adolescents tests, Examination of nutritional status screening test samples used in children and adolescents, Nutrition in adults status screening tests, examination of nutritional status screening test samples used in adult individuals, nutritional status screening tests, examination of nutritional status screening test samples used in elderly individuals, Application presentation, Application presentation, General review, General review; includes topics.

#### **III.YEAR-VI.SEMESTER SPRING TERM**

#### **COMPULSORY COURSES**

# BES 302 Nutritional Problems and Epidemiology in Society (3-0-0-3) (AKTS:4)

Common nutritional problems in society, epidemiology, solution suggestions, nutrition plans and policies.

## BES 304 Collective Nutrition Systems II (3-0-0-3) (AKTS:5)

This course covers Commercial Enterprises in Collective Nutrition Systems, their characteristics, Organization and Kitchen Staff in Commercial Enterprises, TBS Food Preparation and Cooking Methods I, TBS Food Preparation and Cooking Methods II, Service Methods in Commercial Enterprises I, Service Methods in Commercial Enterprises II, Soups in Commercial Enterprises and Sauces, Hygiene I in Mass Nutrition Systems, Hygiene II in Mass Nutrition Systems, HACCP Approach in TBS—Checklists, Quality Management Systems in TBS-ISO 22000 / PAS 220, Cost Control in Mass Nutrition Systems, Project Delivery/Presentation, Project Delivery/ The presentation includes the topics.

## BES 306 Nutritional Therapy and Applications in Pediatric Diseases (3-2-0-4) (AKTS:6)

Importance and Principles of Dietary Therapy in Pediatrics, Causes, Complications and Treatment of Childhood Obesity, Metabolic syndrome and diet therapy, Protein energy malnutrition and diet therapy, Causes and diet therapy of acute gastroenteritis, Lactose intolerance and diet therapy, celiac and diet therapy, Cystic fibrosis diet therapy, Eating disorders and diet therapy, Neurological diseases and diet therapy, Diabetic ketoacidosis and diet therapy.

#### BES 308 Diet Therapy and Applications in Diseases II (3-2-0-4) (AKTS:6)

This course covers Nutrition in Gallbladder and Pancreatic Diseases, Nutrition in Liver Diseases, Nutrition in Liver Diseases, Nutrition in Kidney Diseases, Nutrition in Kidney Diseases, Nutrition in Kidney Diseases, Cancer and Nutrition, Nutrition in Infectious Diseases, Nutrition in Infectious Diseases, Nervous System Diseases and Nutrition, Respiratory System Diseases and Nutrition, Test Diets, Drug-Food Interaction Allergy and Nutrition, Case Study, Case Study.

#### **AREA ELECTIVE COURSES**

## BES 316 Enteral and Parenteral Nutrition (2-0-0-2) (AKTS:3)

"This course; Evaluation of the patient's nutritional status, properties, contents and use of nutritional supplements. determining the conditions, defining enteral nutrition and its history, determining enteral nutrition indications, enteral nutrition Defining nutrition routes, Evaluation of enteral nutrition contraindications, Distinguishing enteral nutrition products and their properties. Product selection and classification of enteral nutrition, Description of parenteral nutrition and its history, Parenteral

nutrition Determination of nutrition indications, Identification of parenteral nutrition routes, Parenteral nutrition contraindications Evaluation of parenteral nutrition products and their characteristics, Product selection in parenteral nutrition and products classification; The functions of water and electrolytes, minerals and hormones in the body, their metabolism, biochemical changes in deficiency and excess states, as well as metabolic changes in hunger and satiety.

## BES 312 Biostatistics (2-0-0-2) (AKTS:3)

Biostatistics and Definitions of Some Basic Concepts, Measurement Format of Data, Use of Biostatistics in Health Sciences, Frequency Distributions and Descriptive Measures, Tables and Graphs, Theoretical Distributions, Population Mean Significance Test, Population Ratio Significance Test, Significance Test of Difference Between Two Peers, Difference Between Two Means Significance Test, Chi-Square Test, Analysis of Variance, Correlation Analysis, Regression Analysis, Non-Parametric Tests and use of SPSS package program.

## BES 324 Nutrition Education and Counseling (2-0-0-2) (AKTS:3)

Definition and principles of education, education methods and tools, communication techniques while teaching, basic features of adult and child education, basic principles and practices of behavior modification therapy, preparation of educational materials, expression, demonstration of educational model examples, students preparing and presenting educational tools and modules, reading a suggested book and discussing it in class.

## BES 318 Functional Nutrition and Health (2-0-0-2) (AKTS:3)

"This course covers Nutraceuticals and the concept of functional food, nutraceuticals and functional food definition, the development process of nutraceuticals and functional foods, classification of functional foods according to their bioactive components, Probiotics and health, Prebiotics and health, Plant sterols, stanols and health, Polyphenols and health, phenolic acids, Polyphenols and health, flavonoids: catechins, anthocyanidins, Phytoestrogens and health, Sulfur compounds (glucosinolates, allicins) and health, Carotenoids and health, Fatty acids (n-3 polyunsaturated fatty acids, monounsaturated fatty acids, oleic conjugated lin and health, Functional foods: market research, National and international regulations related to functional foods, Functional foods: responsibilities of dietitian, General Review.

# BES 322 Nutritional Anthropometry (2-0-0-2) (AKTS:3)

This course; Nutritional anthropometry, its definition and use, Methods for determining body composition., Determination of body weight and height, reference values/standards, indexes, Practice: Gaining measurement practice, Length measurements and width measurements Practice: Gaining measurement practice, Perimeter measurements Practice: Measurement practice Gaining skinfold thickness measurements Practical: Acquiring measurement practice Homework: Making measurements in at least 10 people, Scanning and discussing the publications on the subject, Practice: Evaluating and interpreting the measurements according to reference values, Practice: Measurements of the measurements evaluation and interpretation according to reference values, Presentation and discussion of homework, Presentation and discussion of homework, Presentation and discussion of homework; includes topics.

## BES 326 Developing Standard Meal Recipes (2-0-0-2) (AKTS:3)

This course; Definition and importance of collective nutrition, Definition, importance and benefits of standard food recipes, Names and groups of dishes, Differences between standard weights and standard tariffs, Stages of creating standard recipes, Sensory evaluation, Quality control panel and its features, Creation of standard recipes for meat dishes, Meat and vegetables and legumes dishes, creating standard recipes for soup, rice, pasta and pastries, creating standard recipes for vegetables and legumes with olive oil, developing standard recipes for diet cuisine.

#### **IV.st YEAR-VII.SEMESTER FALL TERM**

#### **COMPULSORY COURSES**

# BES 401 Graduation Project I (3-0-0-3) (AKTS:3)

It includes the methods of doing individual studies in the field of nutrition and dietetics and the techniques of presenting these studies.

# BES 417 Nutrition and Dietetics External Institution Application (4 Week Summer Practice) (1-8-0-5) (AKTS:5)

This internship includes the practical preparation of students for institutional and hospital dietitians under the super-vision of institutional and hospital dietitians and academic staff.

## BES 403 Seminar I (2-0-0-2) (AKTS:2)

Preparing and presenting seminars on special topics related to nutrition and dietetics.

## BES 405 Nutrition and Dietetic Practices I (1-12-0-7) (AKTS:7)

This internship includes pediatric dietitian practices and scientific methods in collective nutrition systems and all processes from purchasing food to removing waste.

## BES 407 Nutrition and Dietetic Practices II (1-12-0-7) (AKTS:7)

This internship includes clinical dietitian practice. It includes learning community health/public health dietitian by practice.

#### **AREA ELECTIVE COURSES**

#### BES 409 Eating Disorders (2-0-0-2) (AKTS:3)

This course; Energy balance and control of body weight, Anthropometric methods used in the assessment of body weight, Definition and classification of obesity, Risk factors and complications of obesity, Obesity and nutrition therapy, Obesity and nutrition therapy, Definition, physiopathology and complications of anorexia nervosa, Anorexia nervosa and nutrition therapy, definition of bulimia nervosa, physiopathology and complications, bulimia nervosa and nutritional therapy, definition and complications of other eating disorders (orthorexia, binge eating etc.), other eating disorders and nutrition therapy, nutritional support in eating disorders, general evaluation, general evaluation; includes topics.

## BES 411 Cancer and Nutrition (2-0-0-2) (AKTS:3)

This course; The concept of adequate and balanced nutrition, food groups, Determination of term assignments, Cancer pathogenesis and types, Cancer pathogenesis and types, National and international cancer statistics, Nutritional effect in preventing cancer formation, Nutritional therapy in different types of cancer, Nutritional therapy in different cancer types, Energy and cancer in cancer. Nutritional requirement and biochemical evaluations, Importance of enteral-parenteral nutrition support in cancer, Vitamin support in cancer, Mineral support in cancer, Fatty acid support in cancer, The effect of cancer on nutritional status and the effect of nutrition on cancer.

## BES 413 Food Additives (2-0-0-2) (AKTS:3)

It gives detailed information about the general properties, classes and toxicological evaluations of food additives, their use in different foods and their legal regulations.

## BES 415 Food Intolerance and Allergies (2-0-0-2) (AKTS:3)

Nutritional therapy applied in food intolerance and food allergies, causative foods, underlying mechanisms and ways of prevention.

#### **IV.YEAR-VIII.SEMESTER SPRING TERM**

#### **COMPULSORY COURSES**

## BES 402 Graduation Project II (3-0-0-3) (AKTS:5)

It includes the methods of doing individual studies in the field of nutrition and dietetics and the techniques of presenting these studies.

## BES 404 Seminar II (2-0-0-2) (AKTS:5)

Preparing and presenting seminars on special topics related to nutrition and dietetics.

#### BES 406 Nutrition and Dietetic Practices III (1-12-0-7) (AKTS:7)

This internship includes pediatric dietitian practices and scientific methods in collective nutrition systems and all processes from purchasing food to removing waste.

#### BES 408 Nutrition and Dietetic Practices IV (1-12-0-7) (AKTS:7)

This internship includes clinical dietitian practice. It includes learning community health/public health dietitian by practice.

## **AREA ELECTIVE COURSES**

## BES 418 Bariatric Surgery and Nutrition (2-0-0-2) (AKTS:3)

This course; Bariatric surgery history, indications, contraindications and the importance of the team, Bariatric surgery methods, Regulation of macronutrients, Evaluation and monitoring of the patient's pre- and postoperative nutritional status in bariatric surgery, Planning nutritional support programs according to bariatric surgery methods, Evaluation of nutritional deficiencies in bariatric surgery methods, Bariatric surgery Evaluation of metabolic complications in bariatric surgery methods, Evaluation of dietary complications in bariatric surgery methods, Monitoring of nutritional status after

bariatric surgery, Monitoring of metabolic status after bariatric surgery, Evaluation of bariatric surgery in metabolic diseases, Weight maintenance and management after bariatric surgery, Psychiatric evaluation of patients before and after bariatric surgery, Planning and maintaining diet therapy after bariatric surgery; includes topics.

## BES 412 Current Dietary Approaches (2-0-0-2) (AKTS:3)

This course covers the effects of current diets on human health in various diseases and health conditions.

# BES 414 Immune System and Immunonutrition (2-0-0-2) (AKTS:3)

Relationships between nutrition and immune functions, reflection of changes in nutrition on immune system, immunonutrients and immunonutrition therapy in diseases.

# BES 416 Microbiota and Diet Interaction (2-0-0-2) (AKTS:3)

The importance of gut microbiota in health and disease and the interaction of diet with microbiota are mentioned.