FINAL INTERNATIONAL UNIVERSITY

FACULTY OF HEALTH SCIENCES

NUTRITION AND DIETETICS Program of Courses

Course categories: UC = University Core; FC = Faculty Core; AC = Area Core; AE = Area Elective; FE = Faculty Elective; UE = University Elective

Semester	Course Code	Course Title	Course Category	Hours			Total Credit	Pre-requisite	ECTS Credit
				Lecture	Tutorial	Lab/Prac.			
1	CHEM121	CHEMISTRY	AC	2	1	2	3	-	5
1	NTDT101	PROFESSIONAL ORIENTATION AND ETHICS	AC	2	0	0	2	-	3
1	ANTY111	BASIC ANATOMY	FC	2	0	0	2	-	4
1	MBIO101	MICROBIOLOGY	FC	2	0	0	2	-	4
1	PHYL101	PHYSIOLOGY-I	FC	2	0	0	2	-	4
1	TUOG101 / TURK131	TURKISH LANGUAGE-I / TURKISH AS A FOREIGN LANGUAGE-I	UC	2	0	0	2	-	3
1	TARH101 / HIST111	ATATURK'S PRINCIPLES AND HISTORY OF TURKISH REFORMS-I	UC	2	0	0	2	-	3
1	ENGL121	ENGLISH-I	UC	3	0	0	3	-	4
		Total 8 courses	**TOTAL:**	**17**	**1**	**2**	**18**		**30**
2	CHEM112	ORGANIC CHEMISTRY	AC	3	0	0	3	CHEM121	4
2	NTDT102	NUTRITIONAL ANTHROPOLOGY	AC	2	0	0	2	-	2
2	ANTY102	ANATOMY-II	FC	2	0	2	3	-	5
2	PHYL102	PHYSIOLOGY-II	FC	2	0	0	2	-	4
2	TUOG102 / TURK132	TURKISH LANGUAGE-II / TURKISH AS A FOREIGN LANGUAGE-II	UC	2	0	0	2	TUOG101 / TURK131	3
2	TARH102 / HIST112	ATATURK'S PRINCIPLES AND HISTORY OF TURKISH REFORMS-II	UC	2	0	0	2	-	3
2	ENGL122	ENGLISH-II	UC	3	0	0	3	ENGL121	4
2	ITEC100	INFORMATION TECHNOLOGIES	UC	2	0	2	3	-	5
		Total 8 courses	**TOTAL:**	**18**	**0**	**4**	**20**		**30**
3	NTDT201	PRINCIPLES OF NUTRITION-I	AC	3	0	2	4	-	6
3	NTDT203	FOOD CHEMISTRY-I	AC	3	0	0	3	-	5
3	NTDT205	NUTRITIONAL BIOCHEMISTRY-I	AC	3	0	0	3	-	4
3	NTDT207	FOOD MICROBIOLOGY AND FOOD SAFETY	AC	3	0	0	3	-	4
3	HESC201	RESEARCH METHODS IN HEALTH SCIENCES	FC	2	0	0	2	-	3
3	HESCXX1	FACULTY ELECTIVE	FE	X	X	X	2	-	4
3	UNIEXX1	UNIVERSITY ELECTIVE	UE	X	X	X	3	-	4
		Total 7 courses	**TOTAL:**	**14**	**0**	**2**	**20**		**30**
4	NTDT202	PRINCIPLES OF NUTRITION-II	AC	3	0	2	4	-	6
4	NTDT204	FOOD CHEMISTRY-II	AC	3	0	0	3	-	5
4	NTDT206	NUTRITIONAL BIOCHEMISTRY-II	AC	3	0	0	3	-	4
4	NTDT208	MOTHER AND CHILD NUTRITION	AC	2	0	2	3	-	3
4	NTDTXX1	AREA ELECTIVE	AE	X	X	X	2	-	4
4	HESCXX2	FACULTY ELECTIVE	FE	X	X	X	2	-	4
4	UNIEXX2	UNIVERSITY ELECTIVE	UE	X	X	X	3	-	4
		Total 7 courses	**TOTAL:**	**11**	**0**	**4**	**20**		**30**
5	NTDT301	MEDICAL NUTRITION THERAPY IN ADULTS-I	AC	3	0	2	4	-	6
5	NTDT303	PEDIATRIC MEDICAL NUTRITION THERAPY-I	AC	2	0	2	3	-	5
5	NTDT305	INSTITUTIONAL NUTRITION-I	AC	3	0	0	3	-	5
5	NTDT307	COMMUNITY NUTRITION ASSESSMENT	AC	2	0	0	2	-	3
5	NTDT309	NUTRITION EDUCATION AND COUNSELING	AC	2	0	1	2	-	3
5	HESCXX3	FACULTY ELECTIVE	FE	X	X	X	2	-	4
5	UNIEXX3	UNIVERSITY ELECTIVE	UE	X	X	X	3	-	4
		Total 7 courses	**TOTAL:**	**12**	**0**	**5**	**19**		**30**
6	NTDT302	MEDICAL NUTRITION THERAPY IN ADULTS-II	AC	3	0	2	4	-	6
6	NTDT304	PEDIATRIC MEDICAL NUTRITION THERAPY-II	AC	2	0	2	3	-	5
6	NTDT306	INSTITUTIONAL NUTRITION-II	AC	3	0	0	3	-	5
6	NTDT308	NUTRITIONAL PROBLEMS AND EPIDEMIOLOGY	AC	2	0	0	2	-	3
6	HESC302	DEMOGRAPHY AND HEALTH	FC	2	0	0	2	-	3
6	NTDTXX2	AREA ELECTIVE	AE	X	X	X	2	-	4
6	UNIEXX4	UNIVERSITY ELECTIVE	UE	X	X	X	3	-	4
		Total 7 courses	**TOTAL:**	**12**	**0**	**4**	**19**		**30**
7	NTDT400	SUMMER INTERNSHIP	AC	0	0	0	0	-	5
7	NTDT401	CLINICAL NUTRITION PLACEMENT IN ADULTS	AC	0	0	12	6	-	7
7	NTDT403	CLINICAL NUTRITION PLACEMENT IN CHILDHOOD	AC	0	0	12	6	-	7
7	NTDT405	FOOD LAW REGULATIONS	AC	2	0	0	2	-	3
7	NTDTXX3	AREA ELECTIVE	AE	X	X	X	2	-	4
7	NTDTXX4	AREA ELECTIVE	AE	X	X	X	2	-	4
		Total 6 courses	**TOTAL:**	**2**	**0**	**24**	**18**		**30**
8	NTDT402	FOOD SERVICE PLACEMENT	AC	0	0	12	6	-	7
8	NTDT404	COMMUNITY NUTRITION PLACEMENT	AC	0	0	12	6	-	7
8	NTDTXX5	AREA ELECTIVE	AE	X	X	X	2	-	4
8	NTDTXX6	AREA ELECTIVE	AE	X	X	X	2	-	4
8	NTDTXX7	AREA ELECTIVE	AE	X	X	X	2	-	4
8	NTDTXX8	AREA ELECTIVE	AE	X	X	X	2	-	4
		Total 6 courses	**TOTAL:**	**0**	**0**	**24**	**20**		**30**
			GRAND TOTAL:	**86**	**1**	**69**	**154**		**240**

Area and Faculty Elective Courses

No.	Course Code	Course Title	Course Category	Hours			Total Credit	Pre-requisite	ECTS Credit
				Lecture	Tutorial	Lab/Prac.			
1	ENGL311	VOCATIONAL ENGLISH FOR NUTRITION AND DIETETICS-I	AE	2	0	0	2		4
2	ENGL312	VOCATIONAL ENGLISH FOR NUTRITION AND DIETETICS-II	AE	2	0	0	2		4
3	NDTD330	ANALYSIS OF SCIENTIFIC PUBLICATIONS	AE	2	0	0	2		4
4	NDTD331	CANCER AND NUTRITION	AE	2	0	0	2		4
5	NDTD332	DETERMINATION OF NUTRITIONAL STATUS	AE	2	0	0	2		4
6	NDTD333	EATING DISORDERS IN ADOLESCENTS	AE	2	0	0	2		4
7	NDTD334	FLUID AND ELECTROLYTE BALANCE	AE	2	0	0	2		4
8	NDTD335	FOOD ADDITIVES	AE	2	0	0	2		4
9	NDTD336	FOOD AND BEVERAGE SERVICES	AE	2	0	0	2		4
10	NDTD337	FOOD GROUPS AND TECHNOLOGIES	AE	2	0	0	2		4

11	NDTD338	FOOD GROUPS IN HEALTHY NUTRITION	AE	2	0	0	2		4
12	NDTD339	FOOD INTOLERANCE AND ALLERGY	AE	2	0	0	2		4
13	NDTD340	FOOD TOXICOLOGY	AE	2	0	0	2		4
14	NDTD341	IMMUNE SYSTEM AND IMMUNONUTRITION	AE	2	0	0	2		4
15	NDTD342	INTRODUCTION TO FOOD SERVICES	AE	2	0	0	2		4
16	NDTD343	INTRODUCTION TO NUTRITION ANTHROPOMETRY	AE	2	0	0	2		4
17	NDTD344	KITCHEN PLANNING AND EQUIPMENT	AE	2	0	0	2		4
18	NDTD345	MACRONUTRIENTS AND DISEASES	AE	2	0	0	2		4
19	NDTD346	MEDICAL BIOLOGY AND GENETICS	AE	2	0	0	2		4
20	NDTD347	MENU PLANNING	AE	2	0	0	2		4
21	NDTD348	METABOLIC DISORDERS	AE	2	0	0	2		4
22	NDTD349	METHODS OF FOOD CONSUMPTION ASSESSMENT	AE	2	0	0	2		4
23	NDTD350	MICRONUTRIENTS AND DISEASES	AE	2	0	0	2		4
24	NDTD351	NUTRITION AND BEHAVIOUR	AE	2	0	0	2		4
25	NDTD352	NUTRITION AND DIETETICS-I	AE	2	0	0	2		4
26	NDTD353	NUTRITION AND DIETETICS-II	AE	2	0	0	2		4
27	NDTD354	NUTRITION AND GENETICS	AE	2	0	0	2		4
28	NDTD355	NUTRITION COUNSELING PRACTICES	AE	2	0	0	2		4
29	NDTD356	NUTRITION ON AGEING	AE	2	0	0	2		4
30	NDTD357	NUTRITION PSYCHOLOGY	AE	2	0	0	2		4
31	NDTD358	NUTRITION SUPPORT AT HOME CARE SERVICE	AE	2	0	0	2		4
32	NDTD359	NUTRITIONAL STRATEGIES IN DISASTER	AE	2	0	0	2		4
33	NDTD360	NUTRITIONAL SUPPORT PRODUCTS AND FUNCTIONAL FOODS	AE	2	0	0	2		4
34	NDTD361	NUTRITIONAL SUPPORT SYSTEMS	AE	2	0	0	2		4
35	NDTD362	OCCUPATIONAL HEALTH AND SAFETY	AE	2	0	0	2		4
36	NDTD363	PREVENTIVE NUTRITION	AE	2	0	0	2		4
37	NDTD364	PROBIOTIC, PREBIOTICS AND HEALTH INTERACTIONS	AE	2	0	0	2		4
38	NDTD365	PROFESSIONAL PROJECTS-I	AE	2	0	0	2		4
39	NDTD366	PROFESSIONAL PROJECTS-II	AE	2	0	0	2		4
40	NDTD367	PSYCHIATRIC DISEASES AND NUTRITION	AE	2	0	0	2		4
41	NDTD368	PUBLIC NUTRITION-I	AE	2	0	0	2		4
42	NDTD369	PUBLIC NUTRITION-II	AE	2	0	0	2		4
43	NDTD370	SEMINAR IN NUTRITION AND DIETETICS-I	AE	2	0	0	2		4
44	NDTD371	SEMINAR IN NUTRITION AND DIETETICS-II	AE	2	0	0	2		4
45	NDTD372	SPORTS NUTRITION	AE	2	0	0	2		4
46	NDTD373	STATISTICAL ANALYSIS METHODS IN NUTRITION AND DIETETICS	AE	2	0	0	2		4
47	NDTD374	SURGICAL TREATMENT OF OBESITY	AE	2	0	0	2		4
48	NDTD375	SUSTAINABLE NUTRITION	AE	2	0	0	2		4
49	NDTD376	USE CREATIVE DRAMA IN NUTRITION EDUCATION	AE	2	0	0	2		4
50	NDTD377	WEIGHT MANAGEMENT IN CHILDREN AND ADOLESCENTS	AE	2	0	0	2		4
51	NDTD378	WORLD CUISINES	AE	2	0	0	2		4
52	PHRM406	PHYTOTHERAPY	AE	2	0	0	2		4
53	PHRM423	FOOD-DRUG INTERACTIONS	AE	2	0	0	2		4
54	HESC330	INFORMATICS IN HEALTH	FE	2	0	0	2		4
55	HESC331	QUALITY IN HEALTH SERVICES	FE	2	0	0	2		4
56	HESC332	DIAGNOSTIC METHODS	FE	2	0	0	2		4
57	HESC333	PROTECTION AGAINST RADIATION	FE	2	0	0	2		4
58	HESC334	LABORATORY TECHNIQUES AND SAFETY	FE	2	0	0	2		4
59	HESC335	PHYSICAL ACTIVITY FOR HEALTH	FE	1	0	2	2		4
60	HESC336	FUNCTIONAL NEUROANATOMY AND NEUROPHYSIOLOGY	FE	2	0	0	2		4
61	HESC337	ERGONOMICS	FE	2	0	0	2		4
62	HESC338	PUBLIC HEALTH	FE	2	0	0	2		4
63	HESC339	DEMOGRAPHY AND HEALTH RELATIONSHIP	FE	2	0	0	2		4
64	HESC340	HISTOLOGY	FE	2	0	0	2		4
65	HESC341	EPIDEMIOLOGY	FE	2	0	0	2		4
66	HESC342	HEALTH EDUCATION AND DEVELOPMENT OF HEALTH	FE	2	0	0	2		4
67	HESC343	DISABILITY AND LIFE	FE	2	0	0	2		4
68	HESC344	HEALTH TOURISM	FE	2	0	0	2		4
69	HESC345	MEDICAL TERMINOLOGY	FE	2	0	0	2		4
70	HESC346	HEALTH LEGISLATION	FE	2	0	0	2		4
71	HESC347	PREVENTIONAL HEALTH	FE	2	0	0	2		4
72	HESC348	PROFESSIONAL ETHICS AND DEONTOLOGY IN HEALTH SCIENCES	FE	2	0	0	2		4
73	HESC351	INFECTION DISEASES	FE	2	0	0	2		4
74	HESC352	BASIC ECG	FE	2	0	0	2		4
75	HESC353	INTRODUCTION TO SYSTEMIC DISEASES	FE	2	0	0	2		4
76	MBIO101	MICROBIOLOGY	FE	2	0	0	2		4
77	HESC354	PRINCIPLES OF NUTRITION	FE	2	0	0	2		4
78	PATH350	PATHOLOGY	FE	2	0	0	2		4
79	PHRM332	PHARMACOLOGY	FE	2	0	0	2		4
80	PSYC231	PSYCHOLOGY	FE	2	0	0	2		4
81	BIOL350	BIOLOGY AND GENETICS	FE	2	0	0	2		4
82	BCHM231	BIOCHEMISTRY	FE	2	0	0	2		4
83	PSYC386	COMMUNICATION AND BEHAVIORAL SCIENCES	FE	2	0	0	2		4

PROGRAM INFORMATION	
General Goal of the Program	The purpose of the Nutrition and Dietetics program; To raise dietitians who increase the protection and development of public health, provide adequate and healthy nutrition for the society, comply with the qualifications determined within the framework of international professional standards, have scientific and ethical values, act in the light of universal values, and follow up-to-date information in the science of nutrition and dietetics.
Program Outputs	1 Gains a deep professional knowledge in the field of Nutrition and Dietetics, both theoretically and practically.
	2 Have the ability to identify, interpret, decide and solve problems in the field of Nutrition and Dietetics using abstract and practical information.
	3 Has the ability to evaluate the nutritional status of healthy individuals, communities and patients, using up-to-date knowledge and skills in the field of Nutrition and Dietetics, and to choose and apply appropriate evidence-based intervention approaches by using analytical thinking in case of problems.
	4 Has the ability to use modern information technologies and technological equipment.
	5 Has the ability to communicate verbally and in writing on national and international professional issues in the field of nutrition and dietetics.
	6 Adopting the importance of lifelong learning and quality management, has the ability to follow the latest developments in science, technology, education and health
	7 Gains the ability to work independently in various fields of Nutrition and Dietetics such as Nutrition Sciences, Dietetics, Collective Meal Systems and Community
	8 Have the ability to plan scientific studies, collect data, analyze, interpret and report results.
	9 Has the knowledge and practical skills to develop food and nutrition plans and policies, and national and international nutrition recommendations for individuals and
	10 They gain the awareness of acting in accordance with ethical rules that will reflect the values and ethical principles that guide the profession.

COURSE DESCRIPTIONS

Course Descriptions – I: All Area Core and Faculty/School Core courses offered by the department of the program.

Course Code	Course Title	Credit	ECTS Credit	Course Catego.	Pre-requisite	Teaching Language
NTDT101	PROFESSIONAL ORIENTATION AND ETHICS	(2,0,0)2	3	AC		English
Course Content	This course exposes students to the background of the nutrition profession, the meaning of professionalism, the Code of Ethics for the profession, and the relationship of dietitians to the health care team. In addition, students are introduced to the scope of practice within the dietitian career, and given opportunities to explore potential career choices. Upon completion of this course, the students will, understand their role in the dietetics profession, explain the code of ethics for the profession, discuss the concept of professionalism as it relates to their career, articulate the educational and certification requirements of nutrition professionals, list and discuss career options within the nutrition field, discuss the process and purpose of the professional development portfolio, summarize the history of the nutrition profession, explain the continuing education process and requirements for nutrition professionals.					
ANTY111	BASIC ANATOMY	(2,0,0)2	4	FC		English
Course Content	Introduction to anatomy and basic concepts, basic medical terminology, regional anatomy and parts of our body, general information about human body structural organization and systems, anatomical position, general information about planes, bones and joints, anatomy of respiratory system, anatomy of musculoskeletal system, brain and nervous system anatomy, cardiovascular system anatomy, digestive system, esophagus, stomach, small, large intestines, liver, pancreas and gallbladder anatomy, endocrine system anatomy, pituitary, hypothalamus, thyroid, parathyroid, adrenal and pineal glands, genitourinary system anatomy , kidneys, ureters, bladder, prostate, uterus and ovaries and reproductive system. To provide the student with a holistic and analytical perspective so that they can solve the possible problems they will encounter after graduation scientifically and without errors.					
PHYL101	PHYSIOLOGY-I	(2,0,0)2	4	FC		English
Course Content	This course is the basis for learning various assessment and treatment methods in the curriculum of the program and for future applications in professional life. Lectures, group work, research, report presentation, discussion will be conducted. The aim of this course is to give information to students on the basis of basic physiological concepts, the normal functioning principles and mechanisms of cell, tissue and organ systems that make up the human body, and systems. In addition, the interaction of systems with each other and the evaluation of how their functions are organized.					
NTDT102	NUTRITIONAL ANTHROPOLOGY	(2,0,0)2	2	AC		English
Course Content	This course will focus on the study of human dietary practices from biological and cultural perspectives. The course aims to include the development of nutritional anthropology, principles of nutrition, principles of ecology, diet from an evolutionary, comparative and historical perspective, the impact of undernutrition on human physiology, and behaviour and methods in nutritional anthropology. Gaining knowledge and skills about nutritional practices and food habits, in different continents and societies and affecting factors. Introduction to Nutritional Anthropology, Kitchen in Pre and Posthistorical Periods, Nutrition in Ancient and Hittite Periods, Eating Tools, Those days, Religions and Nutrition, Food Selection and Culture, Turkish cuisine, Local Cuisine Student Projects.					
ANTY102	ANATOMY-II	(2,0,2)3	5	FC		English
Course Content	This course is the basis for learning various assessment and treatment methods in the curriculum of the program and for future applications in professional life. The aim of this course is to provide students with knowledge and skills about skeletal and muscular systems and body systems that form the basic components of movement. Lectures, group work, research, report presentation, discussion and practice. This course includes the functional and clinical anatomy of the structures that make up the central and peripheral nervous system, sensory organs, and the urogenital system.					
PHYL102	PHYSIOLOGY-II	(2,0,0)2	4	FC		English
Course Content	This course is the basis for learning various assessment and treatment methods in the curriculum of the program and for future applications in professional life. The aim of this course is to provide students with knowledge and skills about skeletal and muscular systems and body systems that form the basic components of movement. Lectures, group work, research, report presentation, discussion will be conducted. The aim of the course is to provide information on the basis of basic physiological concepts, the normal functioning principles and mechanisms of cell, tissue and organ systems that make up the human body, and systems. In addition, the interaction of systems with each other and the evaluation of how their functions are organized.					
NTDT201	PRINCIPLES OF NUTRITION-I	(3,0,2)4	4	AC		English
Course Content	This course will give students an introduction to the fundamental principles of human nutrition emphasizing the topics of structure and function of the macronutrients, their energy metabolism and role in overall health. It is aimed to provide theoretical information about requirements of macronutrients, dietary sources, intake levels, physiological role, and requirement of macronutrients, cooking methods and food groups. The biological determinants of nutrient requirements and the assessment of nutrient status in individuals and populations. The role of nutrition in growth and health through the life cycle. The rationale for the development of dietary guidelines and of nutrition policies in different countries. The role of diet in the development of chronic diseases, such as cardiovascular disease, cancer, diabetes, etc.					
NTDT203	FOOD CHEMISTRY-I	(3,0,0)3	5	AC		English
Course Content	The course is intended to give students an overview of the chemical and physical properties of the major and minor food components and the chemical changes these constituents undergo during handling, processing and storage including those that limit food shelf life. The course will cover water, carbohydrates, protein, lipids, minerals, vitamins and enzymes. In addition, color, flavor, and additives will be discussed. There will be an emphasis on the applied aspects of food chemistry with the help of real-world examples. Problem based learning and group work will be integrated into the course to help students to apply scientific principles to understanding the chemical properties of foods.					
NTDT205	NUTRITIONAL BIOCHEMISTRY-I	(3,0,0)3	4	AC		English
Course Content	The objective of the course is to the function and metabolism of carbohydrate, protein, lipids and vitamins and by chemical changes of their deficiency and excess states. This course will give students an introduction to the fundamental principles of human nutrition emphasizing the topics of structure and function of the macronutrients, their energy metabolism and role in overall health. The details of the digestion process will be described along with the consequences of excess and deficient intake of the various macronutrients. The role of fibre and different types of lipid will receive special attention especially as they relate to the development and/or control of obesity.					
NTDT207	FOOD MICROBIOLOGY AND FOOD SAFETY	(3,0,0)3	4	AC		English
Course Content	The course aims to provide the fundamentals necessary for the assessment of safety and microbiological quality in foods. This course covers the characteristic of microbial growth, intrinsic and extrinsic factors and their relationship to microbial growth; the principles of food fermentation and the role of beneficial microbes; the role of microorganisms and food spoilage; pathogenic microorganisms, infection and intoxication, mycotoxin, viruses and parasites; the principles to control microbial growth; as well as qualitative and quantitative microbiological analysis. Knowledge of the experimental protocols for the determination of the main microbial groups and of some pathogens in food. Furthermore, the teaching provides the basis for the understanding of the basic concepts of hygiene and epidemiology, to safeguard the health of the community.					
HESC201	RESEARCH METHODS IN HEALTH SCIENCES	(2,0,0)2	3	FC		English
Course Content	The aim of this course is to develop students' knowledge, use and evaluation skills. Firstly; General information about research, research designs, data collection tools, examining their validity and reliability and scientific report writing, basic sampling methods, statistical interpretation, statistical estimation methods, hypothesis tests are examined. Courses are conducted by using the SPSS package program. General information about the research, stages and implementation of the research, writing of the research report, development of data collection tools and tools to be used in the study, Calculation Methods on Data, Combining Data and Variables, Introduction to Data Analysis, Frequency Tables, Descriptive Statistics, Graphing and Interpreting, Normal Distribution, Single Sample Tests, Two Independent Tests, Dependent Two-Sample Tests, Independent More Than Two Sample Tests, Correlation Analysis.					
NTDT202	PRINCIPLES OF NUTRITION-II	(3,0,2)4	6	AC		English

Course Content	This course will focus on general definition, and concepts of micronutrients. Micronutrients-health interaction, Importance of water balance, factors affecting water loss, dehydration and damages, prevention and treatment, minerals: Iodine, fluoride, chromium, calcium, phosphorus, magnesium, Iron, zinc, selenium, copper, manganese functions, sources, need, deficiency problems, vitamins: chemistry, properties, sources, absorption and metabolism of vitamins A, D, E, K, need, deficiency problems, Other B group vit. vitamin C, flavonoids chemistry, properties, sources, absorption and metabolism, need, deficiency problems, combining theoretical and practical applications.

NTDT204	**FOOD CHEMISTRY-II**	(3,0,0)3	5	AC		English
Course Content	This course will provide the students with a deep understanding of how food components contribute to overall quality of foods; and to enable students to evaluate and explain how the highly complex nature of food may result in a multitude of desired and undesired reactions which are controlled by a variety of parameters. Reactions of food components during processing: Maillard reaction, enzymatic browning. Non-microbial contaminants such as heavy metals and pesticides, color pigments, aroma compounds, sugar and fat replacers. Discusses the chemical composition of several food groups (meats, fruits, vegetables, and dairy) and describes the chemical reactions and changes that take place during processing and storage, as well their effects on the quality and nutritional characteristics of these foods. .					

NTDT206	**NUTRITIONAL BIOCHEMISTRY-II**	(3,0,0)3	3	AC		English
Course Content	The objective of the course is to the function and metabolism of water and electrolyte, minerals and hormones and by chemical changes of their deficiency and excess states metabolic change in fasting and satiety. Vitamins, Minerals, Water and Electrolytes, Hormones, Metabolic change in fasting and satiety. The aim of this course is to introduce the students to the fundamental principles of nutrition but with particular emphasis on the micro-nutrients (Vitamins and minerals). Their digestion and absorption will be described along with their importance in maintaining metabolic processes and their implications for overall health. The course will also describe the development of nutritional guidelines, how these are derived and their applicability to individuals and populations.					

NTDT208	**MOTHER AND CHILD NUTRITION**	(2,0,2)3	3	AC		English
Course Content	Overview of Issues and Child Nutrition in Turkey and in the World, Pregnancy Physiology, Problems, Needs and Nutrition (theoretical / practical), Breastfeeding Physiology, Problems, Requirements (theoretical / practical), Breast Milk applications, Breast Milk and Properties (theoretical / practical) Nutrition and Mental Development (theoretical / practical), Characteristics and Needs of 0-1 Age Group Children 1 (theoretical / practical), Characteristics of 0-1 Age Group Children, Needs, Supplementary Food, Child Food and Features (theoretical / practical), Nutrition of Preschool and School Age Children (theoretical / practical) Nutrition in Adolescence (Theoretical / practical), Childhood and Adolescent Obesity, Its Problems (Theoretical / practical), Childhood and Adolescent Obesity, Its Problems (Theoretical / practical)					

NTDT301	**MEDICAL NUTRITION THERAPY IN ADULTS-I**	(3,0,2)4	6	AC		English
Course Content	This course introduces the student to the concept of modifying the general diet to meet various medical conditions. Principles of patient interviewing, analysis of the patient's nutritional needs and the interpretation of food restrictions in menu planning and food shopping are presented. The physical, psychological and social needs of the patient are presented with emphasis on its nutritional consequences. This course includes the study of nutritional care of the patient with upper and lower gastrointestinal disorders, weight management, diabetes and related endocrine disorders, coronary heart disease, atherosclerosis, enteral feeding, total parenteral nutrition (TPN), liver disorders, renal disease, cancer, HIV/AIDS and feeding disabilities.					

NTDT303	**PEDIATRIC MEDICAL NUTRITION THERAPY-I**	(2,0,2)3	5	AC		English
Course Content	This course aims to help students in making decisions on medical nutrition therapy and reviewing the recent articles in order to improve themselves. The Important of Medical nutrition therapy in Childhood Disease Premature nutrition, Protein Energy Malnutrition and Medical nutrition therapy, Acute gastroenteritis and Medical nutrition therapy, Malabsorptions (CHO, Protein, Lipid) and Medical nutrition therapy, Metabolic disorders in children and Medical nutrition therapy (PKU), Metabolic disorders in children and Medical nutrition therapy (other aminoacidopathies), Metabolic disorders in children and Medical nutrition therapy (CHO), Metabolic disorders in children and Medical nutrition therapy (Lipid), Type 1 diabetes and Medical nutrition therapy Chronic Kidney Diseases and Medical nutrition therapy, Formulas and enteral products, Oncology and Medical nutrition therapy, Epilepsy and ketogenic diets.					

NTDT305	**INSTITUTIONAL NUTRITION-I**	(3,0,0)3	5	AC		English
Course Content	Management and organizational processes related with foodservice systems management, evaluation of foodservice systems from buying to food storage are the content of this course. What is a foodservice system?, Management and organization in the foodservice systems, Human resources in the foodservice systems, Marketing in the foodservice systems, Managing financial resources in the foodservice systems, Quality assurance in the foodservice systems, Legislation related with foodservice systems, Physical conditions, kitchen and dining hall equipment, Planning the menus and standardization in foodservice systems, Supply chain in foodservice systems, Institutional buying techniques, Food production, Food storage principles in foodservice systems.					

NTDT307	**COMMUNITY NUTRITION ASSESSMENT**	(2,0,0)2	3	AC		English
Course Content	Direct and indirect methods used in determination of nutritional status, anthropometric measurements, biochemistry, biophysics, clinical examination, diet research, ecological factors affecting nutritional status, nutrition related health statistics constitute the content of this course. Since this course is a very important vocational course, the attendance requirement at 70% will be strictly followed. Community nutrition, Nutritional epidemiology and medical statistical data, Methods of detection of nutritional status general classification (direct and indirect methods), Anthropometric measurements, Clinical manifestations, Health story, biochemical and laboratory methods, Assessment of nutrition, determination of food consumption, Indirect methods for determining nutritional status, Determination of Energy Expenditure, Practical applications for determining nutritional status - anthropometric measurements, Practical applications for determining nutritional status-assessment of nutrition, Food consumption surveys and results					

NTDT309	**NUTRITION EDUCATION AND COUNSELING**	(2,0,1)2	3	AC		English
Course Content	This course aims at introducing students to the theories and skills necessary to design and implement nutrition education programs. It shows how nutrition education can facilitate dietary changes in a group of people. It introduces students to nutrition education basics, definition, history, aims, field and challenges. The course introduces students to the science of nutrition, its application in the health education process. The students will learn about nutrition education definition, rationale, impact, role of health educator and nutrition services, and nutritional population problems. Specific educational needs of patients' population with specific health conditions will be emphasized. Also it discusses nutrition education methods, approaches in nutrition counseling and nutrition education challenges.					

NTDT302	**MEDICAL NUTRITION THERAPY IN ADULTS-II**	(3,0,2)4	6	AC		English
Course Content	This course aims to help students in making decisions on medical nutrition therapy and reviewing the recent articles in order to improve themselves. Bone and joint diseases and medical nutrition therapy I, Bone and joint diseases and medical nutrition therapy II, Digestive system diseases and medical nutrition therapy I, Digestive system diseases and medical nutrition therapy II, Digestive system diseases and medical nutrition therapy III, Digestive system diseases and medical nutrition therapy IV, Infectious diseases and medical nutrition therapy I, Infectious diseases and medical nutrition therapy II, Cancer and medical nutrition therapy I, Cancer and medical nutrition therapy II, Nervous system diseases and medical nutrition therapy, Liver diseases and medical nutrition therapy.					

NTDT304	**PEDIATRIC MEDICAL NUTRITION THERAPY-II**	(2,0,2)3	5	AC		English
Course Content	This course covers the essential knowledge and skills for understanding childhood diseases and nutrition. This course aims to help students in making decisions on medical nutrition therapy and reviewing the recent articles in order to improve themselves. The Important of Medical nutrition therapy in Childhood Disease Premature nutrition, Protein Energy Malnutrition and Medical nutrition therapy, Acute gastroenteritis and Medical nutrition therapy, Malabsorptions (CHO, Protein, Lipid) and Medical nutrition therapy, Metabolic disorders in children and Medical nutrition therapy (PKU), Metabolic disorders in children and Medical nutrition therapy (other aminoacidopathies), Metabolic disorders in children and Medical nutrition therapy (CHO), Metabolic disorders in children and Medical nutrition therapy (Lipid), Type 1 diabetes and Medical nutrition therapy Chronic Kidney Diseases and Medical nutrition therapy, Formulas and enteral products, Oncology and Medical nutrition therapy, Epilepsy and ketogenic diets.					

NTDT306	**INSTITUTIONAL NUTRITION-II**	(3,0,0)3	5	AC		English
Course Content	Managing foodservice systems in profit organizations, service methods, cost control, HACCP and other applications are the content of this course. Management of foodservice systems in profit organizations I (kitchen plan, restaurant plan), Management of foodservice systems in profit organizations II (menus, personnel planning), Large-scale food preparation and cooking, Service management in foodservice systems, Banquet management (menu, personnel, cost, marketing and the sales), Foodservice systems in natural disasters, Stock management in foodservice systems, Cost control in foodservice systems I, Cost control in foodservice systems II, Hygiene management in foodservice systems, HACCP, GMP and other applications in foodservice systems, Latest technologies and innovations in foodservice systems, Overview of problems encountered in the foodservice systems.					
NTDT308	**NUTRITIONAL PROBLEMS AND EPIDEMIOLOGY**	(2,0,0)2	3	AC		English
Course Content	The overall objective of this course is to provide students with a critical understanding of theoretical and practical considerations in the conduct of epidemiologic research related to nutrition. The focus will be on observational studies of the role of diet and nutrition in chronic disease (as opposed to food-borne infectious disease outbreaks and associated issues, or under-nutrition). The material will have a strong methodological emphasis and is intended for graduate students with an interest in understanding how epidemiologic studies of diet and chronic disease are conducted. Specifically, students will be expected to gain a critical understanding of the design, conduct, analysis and interpretation of nutritional epidemiologic studies, including the usual methods applied for assessment of this exposure, familiarity with methodological issues related to nutritional epidemiologic studies such as the appropriateness of various study designs for specific research questions, and issues regarding data analysis and interpretation.					
HESC302	**DEMOGRAPHY AND HEALTH**	(2,0,0)2	3	AC		English
Course Content	This course examines population health and well-being consequences of demographic changes from an interdisciplinary approach. This course provides students to explore contemporary issues in how demographic changes affect population health and well-being from both a theoretical and practical standpoint and using national and cross-national comparisons. Moreover, the student will be involved in a novel discussion of ongoing controversies about the causes and effects of such demographic changes. The course will pay special attention to how health intersects with several sociodemographic (age, gender, …), economic (education, social class, …), and contextual (country, …) factors. Finally, the main demographic indicators will be deeply explained and discussed.					
NTDT400	**SUMMER INTERNSHIP**	(0,0,0)0	5	AC		English
Course Content	Developing students' practices on the identification of risk groups in a community, the frequency of health problems of risk groups, their causes and preventive measures. Determination, evaluation and interpretation of the nutritional status and nutritional habits of the society, raising the awareness and education of the individual and society on adequate and balanced nutrition. Determining the nutritional status and nutritional habits of the society, raising awareness and education of the individual and the society on adequate and balanced nutrition and health, developing nutrition education programs/materials for special groups.					
NTDT401	**CLINICAL NUTRITION PLACEMENT IN ADULTS**	(0,0,12)6	7	AC		English
Course Content	The purpose of the internship, the students obtained during three academic years the knowledge and skills in clinical diet (adult) is applied in official or private institutions by applying them to help strengthen the correct decision to develop the skills, opportunities to gain experience at work. This internship will provide the student with an overview of the pathophysiology of disease and resultant nutritional implications. An additional objective of the course is to introduce the student to the terminology necessary to engage in appropriate conversation with other medical professionals. The students will also be introduced to the principles and methods of diet modification for some common diseases.					
NTDT403	**CLINICAL NUTRITION PLACEMENT IN CHILDHOOD**	(0,0,12)6	7	AC		English
Course Content	The purpose of the internship, the students obtained during three academic years, the knowledge and skills in clinical diet (children) is applied in official or private institutions by applying them to help strengthen the correct decision to develop the skills, opportunities to gain experience at work. This internship will provide the student with an overview of the pathophysiology of disease and resultant nutritional implications. An additional objective of the course is to introduce the student to the terminology necessary to engage in appropriate conversation with other medical professionals. The students will also be introduced to the principles and methods of diet modification for some common diseases.					
NTDT405	**FOOD LAW REGULATIONS**	(2,0,0)2	3	AC		English
Course Content	This course is designed to provide practical knowledge for those who must understand the legal and regulatory complexities of the flow of food and agricultural products. The course provides; To be familiar with regulations and able to determine which regulations are applicable to a given food product. To develop an understanding of national laws and regulations that apply to food products, the food industry and other food handlers; to develop the ability to successfully search for food laws, regulations, and other related topics. Food control and historical developments, Food quality, Food additives, Genetic Changed Organisms, Organic, nanotecnologia foods, Pesticides, Food packaging materials, Turkish Food Codex					
NTDT402	**FOOD SERVICE PLACEMENT**	(0,0,12)6	7	AC		English
Course Content	The purpose of the internship, the students obtained during three academic years, the knowledge and skills in clinical diet (food service systems) are applied in official or private institutions by applying them to help strengthen the correct decision to develop the skills, opportunities to gain experience at work. This internship will provide the student with an overview of the pathophysiology of disease and resultant nutritional implications. An additional objective of the course is to introduce the student to the terminology necessary to engage in appropriate conversation with other medical professionals. The students will also be introduced to the principles and methods of diet modification for some common diseases.					
NTDT404	**COMMUNITY NUTRITION PLACEMENT**	(0,0,12)6	7	AC		English
Course Content	The purpose of the internship, the students obtained during three academic years, the knowledge and skills in clinical diet (community nutrition) is applied in official or private institutions by applying them to help strengthen the correct decision to develop the skills, opportunities to gain experience at work. This internship will provide the student with an overview of the pathophysiology of disease and resultant nutritional implications. An additional objective of the course is to introduce the student to the terminology necessary to engage in appropriate conversation with other medical professionals. The students will also be introduced to the principles and methods of diet modification for some common diseases.					

Course Descriptions – II: All Area Core and Faculty/School Core courses offered by other academic units.

Course Code	Course Title	Credit	ECTS Credit	Course Category	Pre-requisite	Teaching Language
CHEM121	**CHEMISTRY**	(2,1,2)3	5	AC		English
Course Content	This course includes basic topics of the scientific method, measurement, states of matter, atomic structure, the periodic table, chemical properties, and chemical reactions as well nomenclature, atomic and molecular structure, bonding, and reactions. The aim of the course is to teach basic theories and principles of general chemistry like matter, atoms, periodic properties, chemical compounds, chemical bonds, chemical reactions, solutions, and gas laws. The course will focus on chemistry, matter, atoms and elements, Compounds and naming, Mole and Molar Mass, Chemical formulas, Mixtures and solutions, Chemical reactions, Aqueous solutions, Oxidation-reduction reactions, Reaction stoichiometry, electronic structure of the atom, Chemical Bonds, Gases, Liquids, Chemical Balance-Aqueous solution balances, descriptive chemistry of metals and non-metals, chemical equilibrium, acids-bases.					
MBIO101	**MICROBIOLOGY**	(2,0,0)2	4	FC		English
Course Content	The aim of this course is to inform students about principles of general microbiology and general aspects of the immune system. Introduction to microbiology and classification of microorganisms Basic morphological structures of bacteria, Bacterial metabolism and growth, Bacterial genetics / General properties of Rickettsiae, Mycoplasmas, Chlamydiae and Spirochetes, General properties of viruses, General properties of fungi / General properties of parasites, Sterilization, disinfection Antibacterial agents, Environmental microbiology / Transmission ways and pathogenesis of infectious agents and normal flora, Transmission ways and pathogenesis of infectious agents and normal flora Introduction to immune system, Mechanisms of Innate immunity /, Infectious agents transmitted from gastrointestinal tract and food borne infections, Infectious agents transmitted from gastrointestinal tract and food borne infection disease.					

CHEM112	**ORGANIC CHEMISTRY**	(3,0,0)3	4		CHEM121	English
Course Content	This course provides a systematic study of the theories, principles, and techniques of organic chemistry. Topics include nomenclature, structure, properties, reactions, and mechanisms of hydrocarbons, alkyl halides, alcohols, and ethers; further topics include isomerization, stereochemistry, and spectroscopy. Topics include; carbon compounds and their nomenclature, synthesis and reactions. Introduction to organic chemistry, Binding and isomerism, Alkanes and Cycloalkanes: Conformational isomer and Geometric Isomer, Alkenes and Alkynes, Aromatic Compounds, Stereoisomerism, Organic Halogen Compounds; Displacement and Separation reactions, Alcohols, Phenols, Ether and Epoxides, Aldehydes and ketones, Carboxylic acids and their derivatives, Carbohydrates, lipids, Amino Acids, Peptides and Proteins.					

Course Descriptions – III: All Area Elective courses offered by the department of the program.

Course Code	Course Title	Credit	ECTS Credit	Course Catego	Pre-requisite	Teaching Language
NDTD330	**ANALYSIS OF SCIENTIFIC PUBLICATIONS**	(2,0,0)2	4	AE		English
Course Content	Review the scientific articles related to food, nutrition and dietetics. Introduction of the course instruction, Introduction to Scientific Publication Analysis Course, how is the literature search done? What are the Databases? How to reach the Scientific Article? Research Methods in the Field of Nutrition and Diet, how to read, analyze and discuss a scientific article? Cross-Sectional Research Type English Article Presentation and Discussion Case-Control Research Type English Article Presentation and Discussion, Clinical (intervention / experimental) Research Type English Article Presentation and Discussion, Prospective (longitudinal / longitudinal) Research Type English Article Presentation and Discussion					
NDTD331	**CANCER AND NUTRITION**	(2,0,0)2	4	AE		English
Course Content	This will provide the student with an overview of the challenges associated with the evaluation and maintenance of cancer patients' nutritional status. The course aims to help students in making decisions on medical nutrition therapy for cancer prevention and cancer, and reviewing the recent articles in order to improve themselves. The definition of cancer, the prevalence of cancer in Turkey and the World, Nutrigenetics, Cellular cancer processes, Role of macronutrients in cancer prevention and cancer, Role of micronutrients in cancer prevention and cancer, Nutrition screening and assessment in oncology, Nutrition support for oncology patients.					
NDTD332	**DETERMINATION OF NUTRITIONAL STATUS**	(2,0,0)2	4	AE		English
Course Content	This course introduces assessment of nutritional status of groups and individuals. Limitations of the various methods used for collecting dietary information will be discussed. The course covers various assessment activities including assessment of dietary intake using proper computer programs, anthropometric measurement suitable for different age groups, biochemical assays, physical and clinical examination. The sensitivity, reliability and reproducibility of each technique will be discussed. The students will be subjected to practical training to acquaint them with every technique. Students will learn about anthropometrics measurement techniques and devices and dietary analysis and evaluation using both qualitative and quantitative methodology. Techniques to measure energy expenditure and biochemical assessment will also be covered. Additionally, students will learn about assessment of body composition using a variety of techniques, clinical assessment of nutritional status/ subjective global assessment SGA, national dietary and nutrition surveys, computerized dietary analysis systems and interpretation of data will be applied through case study examples with at-risk groups.					
NDTD333	**EATING DISORDERS IN ADOLESCENTS**	(2,0,0)2	4	AE		English
Course Content	This course aims to help students in making decisions on managing diet therapy for eating disorders. This course provides an overview of the etiology, diagnosis and treatment of eating disorders, including anorexia nervosa, bulimia, and binge eating disorder. Treatment is considered from a team-based approach to include psychological, cognitive, and physiological processes. Obesity and its relationship with eating disorders will also be addressed. Topics covered during this course are: Assessment in children, adolescents and adults; CBT and other therapies; Models of care; Prevention; Individual, group and family approaches; Community and inpatient care of children, adolescents and adults; Emergency treatment; Drug treatment; Role of carers and the voluntary sector Ethical issues; Service development.					
NDTD334	**FLUID AND ELECTROLYTE BALANCE**	(2,0,0)2	4	AE		English
Course Content	The distribution of water and electrolytes in the body, its functions, the body fluid compartments and the compartment-soluble particles, the mechanisms regulating fluid and electrolyte balance, fluid and electrolyte imbalances, acid-base balance with the requirements will be examined. Water physiology, Functions of the water, Body water distribution, Body water compartments, Particles that soluble in water, the movement of fluids and electrolytes, Fluid densities, Homeostatic mechanisms which regulate fluid and electrolyte balance. Factors that cause fluid and electrolyte imbalances, Fluid and electrolyte imbalances, Fluid and electrolyte balance in elderly, infants and children, Fluid and electrolyte replacement, Acid-base balance.					
NDTD335	**FOOD ADDITIVES**	(2,0,0)2	4	AE		English
Course Content	To provide knowledge of international and national legislation on the use of food additives. Classification and mechanism of action of food additives. Advantages and risks of additives. Classification, physicochemical properties and role of food additives. Health aspects and legalisation of food additives. Classification, chemical structure, quality standards of food additives and their determination in raw materials, food products. Natural and synthetic colourants. Major preservatives, their effect on product shelf life, toxicological aspects. Natural, nature-identical and synthetic flavours and their identification. Chemical structure of emulsifiers, thickeners, antioxidants, stabilisers and other additives, and their effect on product quality. Mechanisms of action of food additives.					
NDTD336	**FOOD AND BEVERAGE SERVICES**	(2,0,0)2	4	AE		English
Course Content	To give the basic knowledge and skills necessary for food and beverage service. This course provides students with an introduction to the food and beverage services and operations. It offers a historical background of the development of food and beverage services, their operations and management phases, such as product development, production, equipping and staffing, events and performance. Basic principles of service, Style of service, Dining room organization and personnel, Beverage service, Alcoholic drinks and service methods, Institution visiting.					
NDTD337	**FOOD GROUPS AND TECHNOLOGIES**	(2,0,0)2	4	AE		English
Course Content	Integrating principles of food chemistry, food microbiology, food engineering unit operations, nutritional aspects and sensory evaluation through discussions of food processing operations, processing of cereals, fruit and vegetables, meat and meat products, dairy, and fats and oils, chemical and biochemical properties of raw materials and their relationship to current processing methods to obtain food products with desired quality. Students will learn nutritional characteristics of the Five Food Groups, develop a sound knowledge of food composition and classify foods into groups according to their nutrients.					
NDTD338	**FOOD GROUPS IN HEALTHY NUTRITION**	(2,0,0)2	4	AE		English
Course Content	Basic facts and principles of human nutrition are presented. Basic four food groups: Nutritional significance of cereals, pulses, milk, meat, fish, vegetable, egg, nuts, oils, sugar. Definition, function, classification and sources of the four main food groups: bread and cereal group, meat egg legume group, milk and dairy group, vegetable and fruit group with sugar and fat. Food group plans, the Dietary Guidelines, Food Exchange System, Recommended Dietary Allowances and other standards are reviewed to serve as a foundation for food selection. Preparation of food from different food groups and their significance in relation to health.					
NDTD339	**FOOD INTOLERANCE AND ALLERGY**	(2,0,0)2	4	AE		English
	This course provides an overview of food allergy and intolerance, beginning with a definition of food allergy and a description of the two primary types of adverse food reactions. Brief					

Course Content	discussions of the risk factors, epidemiology and natural history, and prevention of food allergies are followed by details on the cutaneous, gastrointestinal, and respiratory manifestations of food allergy. The focus of the course is a description of the diagnostic process involved in identifying food allergies, with an exploration of the benefits and risks of testing and comment on appropriate referrals. The management of food allergy is also discussed, highlighting the treatment of severe reactions after inadvertent ingestion of an allergen. The course closes by addressing the need for patient education and a brief look to the future of treatment. Humoral and Cellular Immunity, Food Antigens Ig-E and non-Ig-E induced reactions, Epidemiology of food intolerances, Classification of food intolerances Diagnose of food intolerances, Atopic dermatitis, Urticaria, Angioedema, Respiratory System and Allergy.

NDTD340	**FOOD TOXICOLOGY**	(2,0,0)2	4	AE		English
Course Content	This course covers the essential knowledge and skills for understanding food toxicology. This course also focuses on the effects/significance of toxicants on consumers' health. Topics to be covered include principles of food toxicology, acute toxicity and evaluation of LD50; common toxicants in foods and methods of detoxifications; toxicological examination indices; hepatological examination; blood, urine and fecal examination. Topics include: mechanisms of regulation of xenobiotic activation and deactivation; developments in the modes of action and impact of natural toxins in food plants; a comprehensive review of the issues surrounding dioxins; the function of antioxidants and their toxicological aspects; phytochemicals, their beneficial effects and the modes of action of this growing group of nutraceuticals from food plants; diet and drug interactions.					
NDTD341	**IMMUNE SYSTEM AND IMMUNONUTRITION**	(2,0,0)2	4	AE		English
Course Content	The relationship between nutrition and the immune system, the effect of the change in nutrition on the immune system, immunonutrients and immunonutrition in diseases. Description of the Immune System and Organs of the Immune System, Immune System Functions, Immunonutrients/Glutamine/Arginine/w-3 fatty acidsHumoral and Cellular Immunity, Selenium, Zinc, Copper, Folic Acid, Antioxidants (Vitamin A,C,E etc), Prebiotics, Probiotics Immune nutrition in critical illness and some chronic diseases. – Students will learn patho-physiology of immune response to infection - nutritional modulation of immune function – malnutrition and immunocompetence - nutrients of importance – metabolic consequences of infection – altered nutritional requirements – nutrient recommendations – Immuno-nutrition for the critically ill.					
NDTD342	**INTRODUCTION TO FOOD SERVICES**	(2,0,0)2	4	AE		English
Course Content	This course aims to help students in making decisions on managing food and beverage operations. Students are introduced to the principles of foodservice operations, beginning with an overview of the foodservice industry at large. Attention is initially focused on major industry segments, business practices, and trends. Subsequently, detailed consideration is given to the components of the foodservice system: marketing, menu planning, production, service, controls, and quality assurance. Product and systems differentiation in various industry segments are emphasized throughout the course.					
NDTD343	**INTRODUCTION TO NUTRITION ANTHROPOMETRY**	(2,0,0)2	4	AE		English
Course Content	The goal of the course is to introduce the concepts of nutritional assessment and the practical application of these concepts in the nutritional care of clients in clinical, community, and research settings. Definition and methods of anthropometric measurements. What is Nutrition Anthropometry? Body weight measurement for children and adults, Body height measurement for children and adults, Growth monitoring in children, Body fat free mass and fat mass, Skinfold thickness, Skinfold thickness, Anthropometric measurements for disabled people and elderly, Body composition measurement, Biophysical measurement					
NDTD344	**KITCHEN PLANNING AND EQUIPMENT**	(2,0,0)2	4	AE		English
Course Content	The aim of this course is to enhance the skills of students by introducing kitchen tools and equipment, to give the knowledge about the principles of the kitchen and service area, kitchen management and organization, equipment, kitchen installations, layout, design, and internal decoration of both production and service areas in a restaurant or food production facility. Introduction to kitchen planning, Importance of kitchen planning, kitchen types, kitchen planning checklist, Kitchen equipment and their properties, Parts of the kitchen, Food borne illnesses, Occupational health and safety, Acceptance of good, storage, preparation, service, distribution.					
NDTD345	**MACRONUTRIENTS AND DISEASES**	(2,0,0)2	4	AE		English
Course Content	This course aims to help students in understanding the importance of macro nutrients for health, synthesizing nutrition knowledge, learning the relationship between macro nutrients with various diseases, and discussing recent publications that discuss the relationship between diseases and macro nutrients. The course aims; To understand the physiological importance of macronutrient (carbohydrates, lipids and protein) metabolism and function in the human body, including factors that affect dietary requirements. To understand macronutrient metabolism and function in relationship to the metabolic abnormalities of various diseases (diabetes, cardiovascular, Celiac, carbohydrate intolerances, etc.), and the roles of dietary prevention and nutritional management in these disease states. To develop a sound knowledge base that can be applied to a wide variety of practical situations.					
NDTD346	**MEDICAL BIOLOGY AND GENETICS**	(2,0,0)2	4	AE		English
Course Content	The course is an introduction to medical biology and genetics and methods used within these fields. The subject content is the following. The structure of the genome: chromosomes, chromosomal structure, and extrachromosomal inheritance. The molecular basis of transmission of genetic information: nucleic acids and proteins. DNA replication, DNA repair, mutations, recombination, transposition, transcription, and translation. Examples of gene regulation. Inheritance of genetic information: meiosis, sexual reproduction and classical genetics and transfer of DNA between bacteria. Gene technology: restriction mapping, genetic libraries, cloning, gene expressions to overproduce proteins of interest, DNA/RNA-sequencing, PCR. The possibilities, limitations and ethics of gene technology are discussed.					
NDTD347	**MENU PLANNING**	(2,0,0)2	4	AE		English
Course Content	In this course, students examine the basic elements of menu planning. Topics include pricing, ordering, recipe conversion, and various types of menus and food preferences. Nutrition receives special emphasis. Other topics include marketing strategies, the life cycle of the menu, and cost-controls. Students will: Develop an understanding of the procedures and best practices associated with menu planning; Identify and discuss the elements of proper menu planning, including ordering, conversion, and food preferences; Assess the importance of nutrition, and understand how it relates to the menu planning process; and explain various other concepts relevant to menu planning, including marketing strategies, cost-controls, and the life cycle of the menu.					
NDTD348	**METABOLIC DISORDERS**	(2,0,0)2	4	AE		English
Course Content	The course focuses on the causes of metabolic disorders and kinds of these disorders which can be a result of genetics, a deficiency in a certain hormone or enzyme, consuming too much of certain foods, or a number of other factors. This course provides students with sufficient knowledge on the most common of these disorders. The course includes topics on Diabetes Mellitus, metabolic syndrome, obesity, inborn errors of metabolism, iodine deficiency disorder, and celiac disease. Importance of nutrition in congenital, autosomal recessive, enzyme or cofactor deficiency induced metabolic disorders and medical nutrition therapy of them. Introduction to metabolic disorders, Phenylketonuria MSUD, Tyrosinemia, Homocystinuria, Organic Acidemia, Urea Cycle Disorders, Propionate Metabolism Disorders Carbohydrate Metabolism Disorders, Fatty Acid Oxidation Disorders.					
NDTD349	**METHODS OF FOOD CONSUMPTION ASSESSMENT**	(2,0,0)2	4	AE		English
Course Content	This course provides a comprehensive introduction to the methods and approaches for conducting nutrition assessment of individuals and populations throughout the lifecycle. Main topics include in-depth overview of the assessment methods, strengths and limitations of methodology, evaluation and interpretation of assessment data, sources of measurement errors, validity of assessment methods, and basic analytical approaches used to interpret assessment data. 24-hour recall, Food frequency questionnaire Food record, Observation of food intake, Advantages and disadvantages of food consumption, Advantages and disadvantages of food consumption, Comparison of food consumption, Determination of food consumption in scientific research, Food consumption with developing technologies.					
NDTD350	**MICRONUTRIENTS AND DISEASES**	(2,0,0)2	4	AE		English
Course Content	This course aims to help students in understanding the importance of micronutrients for health, synthesizing nutrition knowledge, learning the relationship between macro nutrients with various diseases, studying recent publications that discuss the relationship between diseases and micronutrients. Introduction to micro nutrients, The properties, digestion, absorption, metabolism of vitamins A and D their relationships with diseases, The properties, digestion, absorption, metabolism of vitamins E and K and B1-B2 of vitamins C and vitamins niacin -B6 and vitamins folate and B12 vitamins and pantothenic acid and biotin vitamins, minerals Ca, Zn, minerals Se, Mg, minerals P, I, minerals Na, K of minerals Fe and their relationships with diseases.					

NDTD351	NUTRITION AND BEHAVIOUR	(2,0,0)2	4	AE		English
Course Content	The objective of the course is to evaluate the effects of macro and micro nutrients and nonnutritive substances on behaviour. Students will; gain a foundation in the physiology and biochemistry of nutrition, complemented by units on the role of nutrition in behaviour and cognition, and the management of associated clinical conditions; discover the role of nutrition from preconception to old age including topics such as in-utero programming, infant feeding practices, the development of food likes and dislikes in children, food promotion, psychological factors contributing to the development of obesity including appetite and weight control, disordered eating behaviours, prevention of diet-related disease, and the role of diet in normal ageing and age-related conditions.					
NDTD352	NUTRITION AND DIETETICS-I	(2,0,0)2	4	AE		English
Course Content	The aim of the course is to enable students to develop the knowledge and skills in nutrition science, dietetics and clinical nutrition and behavioural sciences which form the basis for the certification of dietitians and for working in health care. The course is designed to teach students how to gather information, analyze, present and discuss data and address current issues in dietetics. During the course the students will develop the ability to identify, critically analyse and solve nutrition and nutrition-related problems of the individual and in the society. Students will also develop the ability to independently initiate and propose improvements with respect to aspects of cooking and food technology, culture, social, psychology, environment and economy.					
NDTD353	NUTRITION AND DIETETICS-II	(2,0,0)2	4	AE		English
Course Content	The aim of the course is to enable students to develop the knowledge and skills in nutrition science, dietetics and clinical nutrition and behavioural sciences which form the basis for the certification of dietitians and for working in health care. The course is designed to teach students how to gather information, analyze, present and discuss data and address current issues in dietetics. During the course the students will develop the ability to identify, critically analyse and solve nutrition and nutrition-related problems of the individual and in the society. Students will also develop the ability to independently initiate and propose improvements with respect to aspects of cooking and food technology, culture, social, psychology, environment and economy.					
NDTD354	NUTRITION AND GENETICS	(2,0,0)2	4	AE		English
Course Content	This course focuses on the effect of diet on gene expression, and nutrigenetics, how genetic differences affect nutrient uptake and metabolism. This course involves heritability; genetic diversity - ethnic differences and gene variants- genetic variation; the future of genetic nutrition - nutrigenetics and nutrigenomics. History of Genetics, human genome Project, DNA, mutation and illness nutrients related to the genes, Genetic variation, genes and nutrients related to the genes, Nutrigenetics and nutrigenomics, Genetic, nutrition and cardiovascular disease, Nutrients and genes expression, Taste and genetic, Vitamins and genes, Cancer, genetic and nutrition, Obesity, genetic and nutrition.					
NDTD355	NUTRITION COUNSELING PRACTICES	(2,0,0)2	4	AE		English
Course Content	This course will increase and refine the student's pre-professional experience in helping people change their eating habits for improving their health and reducing the risk of chronic diseases. Introduction to the fundamentals of professional dietetic practice, nutrition assessment, healthcare meal and menu planning, interviewing and counselling. Nutritional counseling services, practice methods and training methods. Introduction of Nutrition Counseling Practices, Definition and principles of education, Education paths and methods, Education materials and principles for the preparation of these materials, Communication and Awareness, Ethics in Nutrition Education Behavior Therapy, Preparation of Education Plan and Module, Media and Nutrition, Literature review, Project Presentations.					
NDTD356	NUTRITION ON AGEING	(2,0,0)2	4	AE		English
Course Content	This course reviews the health issues and nutritional needs of older adults, from a public health perspective. It integrates biology of aging, nutritional impacts on longevity and age-associated diseases, and nutritional interventions for healthy aging. Topics will include pathophysiology of aging, nutritional needs of older adults, implications of nutrition on lifespan and healthspan, and nutritional interventions for major aging-related diseases. Apply principles of good nutrition across the continuum of care for older adults residing in the community and in long-term care facilities. Evaluate the impact of chronic and acute diseases on organ system function and nutrient requirements in older adults.					
NDTD357	NUTRITION PSYCHOLOGY	(2,0,0)2	4	AE		English
Course Content	This course will examine attitudes, behaviors, and practices surrounding food choices and eating behaviors. Students will use psychological, biological, cultural, and social theories to investigate these fundamental human behaviors. Students will apply current research from each of these approaches to better understand their own behavior. The relationship between nutrition and psychology, the hedonic sub-dimensions of nutrition and developmental, cognitive, psychological and physiological models. Metabolic effects of psychological situation, Theoretical model in food selection 1: Developmental model, Theoretical model in food selection 2: Cognitive model. Theoretical model in food selection 3: Psychological model, Theoretical model in food selection 4: Physiological model, Appetite regulation: hunger-satiety mechanism, Bio-circadian nutrition, Emotional metabolism, mood and food craving triangle, Current approaches to eating disorders.					
NDTD358	NUTRITION SUPPORT AT HOME CARE SERVICE	(2,0,0)2	4	AE		English
Course Content	Nutritional status assessment methods, support for enteral and parenteral nutrition and monitoring, calculation of energy and nutrient requirements, case presentation for disease-specific nutritional support, case follow-up and practical applications. Description of home care service and Introduction of nutritional support, Malnutrition, determination of nutritional assessment at home care service, Methods of nutrition support(enteral and parenteral nutrition) at home care service, Home enteral feeding(nasogastric tube, PEG,PEJ etc.), Home enteral nutrition, complications, indications, contraindication, Home parenteral Nutrition (Central Venous/methods/peripheral), Nutrition education in home care, Nutritional Monitoring for care homes, Enteral-parenteral formulas in home care, Importance of nutritional support team, the role of the dietitian, multidisciplinary approach in home enteral parenteral nutrition.					
NDTD359	NUTRITIONAL STRATEGIES IN DISASTER	(2,0,0)2	4	AE		English
Course Content	The course aims to provide an overview of nutrition during humanitarian emergencies. Nutrition strategies, treatments and follow-up in disasters, crisis management. This will provide an understanding of; the nutritional outcomes of emergencies (malnutrition, morbidity and mortality); and also, the causes of malnutrition and mortality in emergencies (the process and dynamics of an emergency). The course will also develop a broader range of management skills needed in relation to humanitarian response initiatives. The importance of nutrition in disaster, Energy and protein deficiency in disaster, Micronutrient deficiency in disaster, Nutrient enrichment in disaster, Risk groups in the society in disaster, Nutrition in infants and children in disasters, Nutrition in pregnancy in disasters, Nutrition in elderly in disasters, Food safety in disaster, Infection diseases in disaster.					
NDTD360	NUTRITIONAL SUPPORT PRODUCTS AND FUNCTIONAL FOODS	(2,0,0)2	4	AE		English
Course Content	The course focuses on the functional foods and dietary supplements, and natural antioxidants and why those have established their potential roles in the protection of human health against disease. The course will cover various bioactive components and their health function and you will gain insight into the production and marketing of functional foods. This course provides students with sufficient knowledge on the most common hard evidence on the prophylactic and medicinal properties of many natural foods. The course includes topics on an introduction and overview of the history and research on nutraceuticals to date and discusses many functional food compounds. The course includes three parts, general issues with functional foods, functional foods and health and finally, developing functional food products.					
NDTD361	NUTRITIONAL SUPPORT SYSTEMS	(2,0,0)2	4	AE		English
Course Content	This course aims to help students in making decisions on theoretical and practical applications of nutritional support and this course emphasizes the importance of the nutritional support team, the role of dietitian. Course topics include malnutrition, pediatric and neonatal nutrition, parenteral and enteral nutrition, acid base, and more for a complete and comprehensive overview of nutrition support. This course also will introduce the role of enteral formulas leading to better health outcomes and improved quality of life. Also focuses on the advantages of enteral feeding over parenteral feeding. It is also providing students with the knowledge on how to reduce & manage complications of nutritional support, enteral nutrition & parenteral nutrition.					

NDTD362	**OCCUPATIONAL HEALTH AND SAFETY**	(2,0,0)2	4	AE		English
Course Content	This course covers basic nutrition, clinical nutrition and community nutrition. The course covers cancer pathogenesis, cancer treatment, disease-related malnutrition, nutritional screening, pharmacology, immunology and psychiatry. This part also includes supervised practice at a nursing home with nutritional screening of patients. The topics will cover nutrition for different groups (children, pregnant women, the elderly, immigrants) and systematic development and evaluation of theory and evidence-based nutrition-related measures. This course will also include a period of supervised practice at a children's health clinic and/or wellness clinic with observation of consultations and communication of adapted information to recipients. In addition to the two parts, students shall also make an individual topical review based on a topic suggested by the supervisor.					
NDTD363	**PREVENTIVE NUTRITION**	(2,0,0)2	4	AE		English
Course Content	Definition, characteristics, biological effects of probiotic and prebiotics and relations in health and diseases. Definition of probiotic, prebiotic and synbiotics, Properties of probiotic, prebiotic and synbiotics, Biological effects of probiotic, prebiotic and synbiotics, Probiotic, prebiotic and synbiotics related to upper digestive system diseases, Probiotic, prebiotic and synbiotics related to lower digestive system diseases, 8th Week Probiotic, prebiotic and synbiotics related to nervous system diseases, Relationship between probiotic, prebiotic and synbiotics to diabetes mellitus, Probiotic, prebiotic and synbiotics are related to cardiovascular diseases, Probiotic, prebiotic and synbiotics related to cancer, Relationship between probiotic, prebiotic and synbiotics to the immune system.					
NDTD364	**PROBIOTIC, PREBIOTICS AND HEALTH INTERACTIONS**	(2,0,0)2	4	AE		English
Course Content	This course introduces the student to the procedures, practices and ethical issues of scientific research. The parts of a research proposal will be introduced, as well as methods of reporting and disseminating study findings in a comprehensive manner and for particular target audiences This course addresses the essentials of students doing independent research under the supervision of a faculty. Focus will be on the student following an appropriate design strategy/methodology, collecting and analyzing the experimental data, and presenting and discussing their research results on the basis of their original hypothesis and the relevant background and literature available/used. Students are required to write a formal Research Project Report where all these are incorporated and to present and defend their Research Project results and conclusions.					
NDTD365	**PROFESSIONAL PROJECTS-I**	(2,0,0)2	4	AE		English
Course Content	This course introduces the student to the procedures, practices and ethical issues of scientific research. The parts of a research proposal will be introduced, as well as methods of reporting and disseminating study findings in a comprehensive manner and for particular target audiences This course addresses the essentials of students doing independent research under the supervision of a faculty. Focus will be on the student following an appropriate design strategy/methodology, collecting and analyzing the experimental data, and presenting and discussing their research results on the basis of their original hypothesis and the relevant background and literature available/used. Students are required to write a formal Research Project Report where all these are incorporated and to present and defend their Research Project results and conclusions.					
NDTD366	**PROFESSIONAL PROJECTS-II**	(2,0,0)2	4	AE		English
Course Content	This course introduces the student to the procedures, practices and ethical issues of scientific research. The parts of a research proposal will be introduced, as well as methods of reporting and disseminating study findings in a comprehensive manner and for particular target audiences This course addresses the essentials of students doing independent research under the supervision of a faculty. Focus will be on the student following an appropriate design strategy/methodology, collecting and analyzing the experimental data, and presenting and discussing their research results on the basis of their original hypothesis and the relevant background and literature available/used. Students are required to write a formal Research Project Report where all these are incorporated and to present and defend their Research Project results and conclusions.					
NDTD367	**PSYCHIATRIC DISEASES AND NUTRITION**	(2,0,0)2	4	AE		English
Course Content	In this course, we will aim to understand how Good Nutrition plays a crucial role in better management of various different Mental Disorders. We will also learn about multiple different kinds of Eating Disorders. The course will cover; Definition of psychiatric diseases and subspecies, relationship with nutrition, nutritional therapy methods. Psychiatric disorders, pathophysiology and classification, Complications of psychiatric diseases and relation with nutrition, Neurodevelopmental and neurocognitive disorders, Mood disorders and nutrition, Personality disorders and nutrition, Psychotic disorders and nutrition, eating disorders and nutrition, Other psychiatric disorders and nutrition.					
NDTD368	**PUBLIC NUTRITION-I**	(2,0,0)2	4	AE		English
Course Content	The aim of this course is to learn the national and global plans and politics related to public nutrition. This intensive course provides presentations, readings and activities related to the broad range of community-based nutrition research, programs and policies. Public health efforts in communities are implemented in many different types of settings, including community non-profit agencies, worksites, health centers, clinics, hospitals, schools, churches, supermarkets, recreational and sports centers, councils on aging/senior centers, and emergency feeding sites. Students will become familiar with community-based research and programs focused solely on nutrition as well as those in which nutrition is one component. Students will engage in skill-building and participatory activities, as well be introduced to case examples of creative and innovative approaches to community nutrition					
NDTD369	**PUBLIC NUTRITION-II**	(2,0,0)2	4	AE		English
Course Content	The aim of this course is to learn the national and global plans and politics related to public nutrition. This intensive course provides presentations, readings and activities related to the broad range of community-based nutrition research, programs and policies. Public health efforts in communities are implemented in many different types of settings, including community non-profit agencies, worksites, health centers, clinics, hospitals, schools, churches, supermarkets, recreational and sports centers, councils on aging/senior centers, and emergency feeding sites. Students will become familiar with community-based research and programs focused solely on nutrition as well as those in which nutrition is one component. Students will engage in skill-building and participatory activities, as well be introduced to case examples of creative and innovative approaches to community nutrition.					
NDTD370	**SEMINAR IN NUTRITION AND DIETETICS-I**	(2,0,0)2	4	AE		English
Course Content	This undergraduate course is designed to address the intellectual growth needs of students at the advanced or senior level. The objective of the course is to expand and challenge the thought horizons of students through group discussion and independent exploration. To teach the presentation of a report on subjects related with nutrition and dietetics. Introduction to the field seminar, Scientific presentation, Presentation Type, Review and discussion of review and case articles Determination of the subject of the Field Seminar, how to read a scientific article, how to read a scientific article, literature review, how should the article summary be and how it should be written, how should the article introduction and method be and how should it be written, How should the article result and discussion be and how should it be written.					
NDTD371	**SEMINAR IN NUTRITION AND DIETETICS-II**	(2,0,0)2	4	AE		English
Course Content	This undergraduate course is designed to address the intellectual growth needs of students at the advanced or senior level. The objective of the course is to expand and challenge the thought horizons of students through group discussion and independent exploration. To teach the presentation of a report on subjects related with nutrition and dietetics. Introduction to the field seminar, Scientific presentation, Presentation Type, Review and discussion of review and case articles Determination of the subject of the Field Seminar, how to read a scientific article, how to read a scientific article, literature review, how should the article summary be and how it should be written, how should the article introduction and method be and how should it be written, How should the article result and discussion be and how should it be written.					

NDTD372	SPORTS NUTRITION	(2,0,0)2	4	AE		English
Course Content	This course presents the scientific basis for sports nutrition emphasizing the energy needs of activity and effect of dietary intake on performance. Special dietary requirements of specific sports and athletic activities will be taught. Topics will also include dietary ergogenic aids, nutritional supplements, weight control, dietary fads and myths, interaction of alcohol, caffeine and tobacco on an athlete's nutrition status. The class will also stress information for competitive athletes and people of all ages wishing to incorporate nutrition into a physically active lifestyle.					
NDTD373	STATISTICAL ANALYSIS METHODS IN NUTRITION AND DIETETICS	(2,0,0)2	4	AE		English
Course Content	Statistical methods used in nutrition and dietetics studies, data analysis, evaluation and reporting. Variable, Scale, and Data Types, The Characteristics of Data Distribution, Sampling and Sampling Methods, Sampling Distribution, Parameter Estimation and Confidence Interval, The Logic of Sampling Size Calculation and Methods, Central Tendency, Location and Dispersion Measures, Hypothesis Testing, Test types and properties, Statistical decision, appropriate test selection, Normal Distribution Tests and Homogeneity test of variances, Independent Groups Hypothesis Tests (Parametric and Nonparametric Test) Dependent Groups (paired Samples)Hypothesis Tests (Parametric and Nonparametric Test) Chi-Square Tests), One Way ANOVA and Post-Hoc Tests , Correlation Analysis and Simple Linear, Regression Analysis, Multiple Linear Regression Analysis, Logistic Regression Analysis.					
NDTD374	SURGICAL TREATMENT OF OBESITY	(2,0,0)2	4	AE		English
Course Content	Definition of obesity and obesity surgery, techniques, indications, contraindications and complications, pre and post-operative medical nutritional therapy approach in bariatric surgery. Definition of obesity, Types of treatment for obesity, Chronological development and frequency of obesity surgery, Complications after obesity surgery, Preoperative medical nutrition therapy approach in obesity surgery, Preoperative medical nutrition therapy approach in obesity surgery, Postoperative medical nutrition therapy approach in obesity surgery, Preoperative medical nutrition therapy approach in obesity surgery, Nutritional risk after obesity surgery, Nutritional support in obesity surgery.					
NDTD375	SUSTAINABLE NUTRITION	(2,0,0)2	4	AE		English
Course Content	This course focuses on, 'sustainable diets' approaches and examine sustainable diets by using systems-based, trans- and multi-disciplinary models that incorporate social, economic, governance, health, cultural, and environmental dimensions. Core elements will cover: (a) definitions, terminologies, models, application to diets and food systems; (b) frameworks and limitations of sustainable diets; (c) food consumption as an alternative framework; (d) sustainable food consumption guidelines; and (e) strategies to promote more sustainable food consumption. An emphasis will be on transitioning away from diets per se to a novel 'food consumption' model, using sustainable agriculture as a reference framework. Students each week will also select and discuss papers covering diverse aspects of sustainable food systems. Major assignments include (i) applying an innovative methodology - multi-criteria analysis - to assess the relative sustainability of various foods; and (ii) developing guidelines for food consumption as an alternative to typical sustainable dietary guidelines approaches.					
NDTD376	USE CREATIVE DRAMA IN NUTRITION EDUCATION	(2,0,0)2	4	AE		English
Course Content	Communication-interaction, reliance and harmonization practice; basic concepts of creative drama such as creativity, drama, creative drama, communication-interaction, play, role playing, improvisation, action; creative drama lesson plan review; creative drama lesson plan preparation; practice creative drama lesson. Dating-Communication Studies- Introduction to the Course, Communication-Interaction Studies, Confidence-Adaptation Studies, Theoretical Study: The History of Creative Drama), Theoretical study (creativity, drama, creative drama, communication-interaction, role playing, improvisation, action, dramatic play, etc.), Theoretical Study: Steps, dimensions, items of creative drama), Theoretical Study: Role Playing and Introduction to Improvisation, Role Playing and Improvisation, Relationship between Literary Genres and Creative Drama, Creative Drama Lesson Plan Review.					
NDTD377	WEIGHT MANAGEMENT IN CHILDREN AND ADOLESCENTS	(2,0,0)2	4	AE		English
Course Content	This course focuses on the current status of preventive and population-level interventions to reduce obesity risk in children and adolescents, with an emphasis on community-level, public health policy approaches to promoting healthier eating and active living. Growth monitoring, nutritional requirements, nutrition-related problems, prevention of obesity, obesity-related health problems, and obesity treatment in children and adolescents. Growth monitoring and pubertal development, Defining nutrition-related problems in children and adolescents, Nutritional requirements in children and adolescents, Obesity in children and adolescents, Obesity in children and adolescents, Menu planning for children and adolescents.					
NDTD378	WORLD CUISINES	(2,0,0)2	4	AE		English
Course Content	This course is a study of the cuisines of the world, including Asia, Europe, the Mediterranean and Africa. Students are exposed to history, cultural influences and common recipes. Students gain knowledge of international cuisine cultures. Food and culture, Historical development of cuisine, Turkish cuisine, Turkish traditional foods and its health effects, Asian countries cuisine - East and West Asia, Asian countries cuisine - North and South Asia, European countries cuisine- West Europea European countries cuisine- Other European Countries, American cuisine, African cuisine, Beverages and culture.					

Course Descriptions – IV: All Area Elective courses offered by other academic units.

Course Code	Course Title	Credit	ECTS Credit	Course Category	Pre-requisite	Teaching Language
ENGL311	VOCATIONAL ENGLISH FOR NUTRITION AND DIETETICS-I	(2,0,0)2	4	AE		English
Course Content	Within the scope of ENGL311 Vocational English for Nutrition and Dietetics-I course, it is aimed to read and comprehend and if necessary translate the texts written in technical language in the field of Food Science and Technology (Food Engineering) in order to support / guide the 3rd grade undergraduate students who have already studied English or finished Preparatory Program or whose English is at intermediate level. In addition, the students are encouraged to read, speak and ask questions by actively participating in the course in the classroom environment. The course focuses on authentic texts and additional materials related to the field. Communication in the classroom is predominantly English and students are encouraged to write short texts in their own field..					
ENGL312	VOCATIONAL ENGLISH FOR NUTRITION AND DIETETICS-II	(2,0,0)2	4	AE		English
Course Content	This course is the second part of ENGL311 Vocational English for Nutrition and Dietetics-I . The aim of this course is to ensure that the students have gained communicative skills about their job by practicing the relevant lexical devices and language structures used in nutrition and dietetics. The learning outcomes of the course include; Students will be able to communicate with patients and understand their problems; understand articles about nutrition and dietetics and do research about their occupation and write experimental research papers. The content of the course covers discussion about nutrition and dietetics, listening to daily events about nutrition and dietetics, reading articles about nutrition and dietetics and related sub-fields.					
PHRM406	PHYTOTHERAPY	(2,0,0)2	4	AE		English
Course Content	The aim of the phytotherapy course is to state the regulatory and curative role of herbal medicines on human health. This course introduces the introduction and history of phytotherapy, plants used against gastrointestinal diseases, cardiovascular diseases, respiratory system diseases, urinary system diseases, rheumatism, sedatives, gynecology, ophthalmology, dermatology, cancer treatment, aromatic baths. Learning outcomes; 1. Knows herbal medicine preparation methods. 2. Learns herbal drugs (such as carminative, sedative, liver protector) used in certain symptoms. 3. Knows the points to be considered while preparing and using herbal teas (dose, toxicity, interaction, side effects). 4. Gains knowledge about the preparation samples available in the market. 5. Prepares herbal tea formulas.					
PHRM423	FOOD-DRUG INTERACTIONS	(2,0,0)2	4	AE		English

Course Content	The aim of the course is to give detail information about the interaction mechanisms between food and drugs, the bioactive substances in food and the foods that speed up or slow down the action of the medications and the adverse effects of the foods. Pharmacology: Basic Concepts, Description of Drug, Basic rules of drug application Pharmacodynamics, Pharmacokinetics, Antibiotics- Food Interactions, Anticoagulants and Antianaemics Drugs- Food Interactions, Gastrointestinal Disorders Drugs- Food Interactions, Cardiovascular, Antihypertensives and Chemotherapeutic Drugs-Food Interactions, Autonomic and Central Nervous System Agents, Antidepressant Drugs-Food Interactions.

Course Descriptions – III: All Faculty Elective courses offered by the department of the program.

Course Code	Course Title	Credit	ECTS Credit	Course Catego	Pre-requisite	Teaching Language
HESC330	**INFORMATICS IN HEALTH**	(2,0,0)2	4	FE		English
Course Content	The course presents the fundamental principles, concepts, and technological elements that make up the building blocks of Health Informatics. It introduces fundamental characteristics of data, information, and knowledge in the domain, the common algorithms for health applications, and IT components in representative clinical processes. It also introduces the conceptual framework for handling the collection, storage and the optimal use of biomedical data. It introduces the concepts of population health and precision medicine and the information systems that support them. It covers basic principles of knowledge management systems in biomedicine, various aspects of Health Information Technology standards, and IT aspects of clinical process modeling.					
HESC331	**QUALITY IN HEALTH SERVICES**	(2,0,0)2	4	FE		English
Course Content	The aim of this course to gain theoretical and practical knowledge in the following areas://Quality and Total Quality Management concepts and the introduction of the concepts, Introducing the concepts of quality management in health care, "SKS-hospital 5. Version" of the quality and accreditation standards the creation of relevant documents, registration, storage, Definition of Quality Concept/Total Quality Management (TQM) Development\TQM Practices and Quality Pioneers\SKS-hospital general introduction of Version 5\Corporate Services,\nprepare a document on Risk Management and Risk Calculator\Safety Reporting System to collect data on and document preparation\Patients and prepare a document on employees Oriented Services\prepare a document on Health Care\prepare a document on Support Services\Management patients document related indicators/Prepare related document with patients and employee oriented services.					
HESC332	**DIAGNOSTIC METHODS**	(2,0,0)2	4	FE		English
Course Content	This course includes General diagnostic methods, Radiodiagnostic diagnostic methods, muscular system diagnosis methods, skeletal system diagnosis methods, neurological system diagnosis methods, diagnostic methods in respiratory system diseases, diagnostic methods in cardiovascular diseases, Prenatal diagnosis methods, Diagnostic methods in orthopedics, Neurological diagnosis methods, Brain Diagnostic methods in surgery, diagnostic approach to young and old patients, diagnostic approach in athlete health, diagnostic evaluation in physiotherapy and rehabilitation, medical diagnosis methods used in determining the diseases of the systems, working mechanisms and principles of devices and equipment used for diagnosis, evaluation methods.					
HESC333	**PROTECTION AGAINST RADIATION**	(2,0,0)2	4	FE		English
Course Content	This course is aimed to learn the damage of radiation to human health and the environment and to understand and apply radiation protection methods. This course composed of information entry systems and health informatics, information and communication technologies. The course will cover the historical development of radiation in medicine and to learn the basic principles of radiation protection. In this course, the definition and types of radiation, radioactivity, radiation units and radiation measurement methods, basic principles of radiation protection, biological effects of radiation, radiation systems used in protection, dose limitations, pregnancy and radiation, whole body and organ dose limitations, radiation protection in radiotherapy / radiology, legal regulations on radioactive waste, legal obligations in radiation accidents, and emergency procedures.					
HESC334	**LABORATORY TECHNIQUES AND SAFETY**	(2,0,0)2	4	FE		English
Course Content	The objective of this course is to provide competence to the students in providing laboratory security, to accomplish procedure before and after analysis, to perform separation processes, to prepare solutions and to perform basic laboratory. This course includes laboratory working principles, laboratory safety, things to be followed when working with chemicals, things to be followed when working with glass materials, laboratory tools and equipment, basic procedures in the laboratory, chemicals and safety precautions harmful to human health, laboratory accidents and first aid, transportation of chemicals and storage, disposal of chemical wastes and issues to be considered, planning an experiment, setting up mechanisms, experiment book keeping, solution preparation, sample and solution storage, cleaning glass materials and drying techniques.					
HESC335	**PHYSICAL ACTIVITY FOR HEALTH**	(1,0,2)2	4	FE		English
Course Content	This course will consider contemporary definitions of physical activity and sedentary behaviour and current data regarding population levels. The course will also examine in detail the relationship between these behaviours and health with a focus on specific chronic conditions. Drawing from the evidence-base, the course will critically consider the current physical activity and sedentary behaviour recommendations, and examine current policy initiatives. This course includes concepts related to physical activity, types of physical activity, physiological responses to physical activity, relationship between physical activity and health, physical activity and physical fitness, energy and weight control, physical activity in children and adolescents, physical activity in adults, physical activity in the elderly.					
HESC336	**FUNCTIONAL NEUROANATOMY AND NEUROPHYSIOLOGY**	(2,0,0)2	4	FE		English
Course Content	This course includes introduction to the central nervous system, gross anatomy of the medulla spinalis (MS), internal structure of MS, descending pathways, ascending pathways, peripheral nervous system and its pathologies, autonomic nervous system, meninges, hemispheres and cerebrospinal fluid circulation, cerebral artery , vein and its pathologies, functional areas of the brain, cranial nerves and pathologies, diencephalon and its pathologies, brain stem, cerebellum and its pathologies and limbic system, introduction to neurophysiology, central nervous system organization, sleep physiology, cerebrospinal fluid, blood brain barrier, thalamus, hypothalamus, reticular formation, basal ganglia, cerebellum, sensory processing, motor cortex, control of voluntary movement, speech, learning, memory, pain mechanisms.					
HESC337	**ERGONOMICS**	(2,0,0)2	4	FE		English
Course Content	The aim of this course is to define the primary needs for designing a suitable working environment for the individual in line with design principles such as function and comfort, and to learn the application of ergonomic and anthropometric principles in the design of various spaces and their elements-reinforcements. Definition, scope, historical process and related disciplines of ergonomics. Industrial ergonomics, furniture and space ergonomics concepts. Structural features of the human body, movement system, bones, joints and muscles. Architecture-ergonomics relationship. Human dimensions and anthropometric approach. Comfort concept. General principles of interior design and critical dimensions of the equipment of these spaces. Teaching information about the application of anthropometric data in furniture and interiors.					
HESC338	**PUBLIC HEALTH**	(2,0,0)2	4	FE		English
Course Content	The course is aimed for the student to comprehend the meaning and scope of public health. It is aimed to understand the importance of the factors affecting the health of the individual, to examine the factors affecting public health from the perspective of public health, to understand the inequalities in health by emphasizing the situation in the world and in Turkey. Information will be given on access to health services and factors affecting it, obstacles that may arise in service delivery and how to remove them, rights in the field of maternal and child health services and reproductive health, evaluation of the current situation in infectious diseases in the world and in Turkey, assessing their own situation in terms of the health of health workers, the importance of environmental health in terms of public health, to be able to look at people with disabilities within the framework of the social model and to develop the right attitude in this regard, regulations on smoking and tobacco control, and understand and evaluate the importance of access to healthy food.					
HESC339	**DEMOGRAPHY AND HEALTH RELATIONSHIP**	(2,0,0)2	4	FE		English
Course Content	This course examines population health and well-being consequences of demographic changes from an interdisciplinary approach. This course provides students to explore contemporary issues in how demographic changes affect population health and well-being from both a theoretical and practical standpoint and using national and cross-national comparisons. Moreover, the student will be involved in a novel discussion of ongoing controversies about the causes and effects of such demographic changes. The course will pay special attention to how health intersects with several sociodemographic (age, gender, ...), economic (education, social class, ...), and contextual (country, ...) factors. Finally, the main demographic indicators will be deeply explained and discussed.					
HESC340	**HISTOLOGY**	(2,0,0)2	4	FE		English
Course Content	The course will involve a study of general tissue characteristics and will explore histologically and ultrastructurally the different tissue types in the body including epithelial, connective, skeletal, blood/vascular, muscular, and neurological tissues as well as the various organ systems including cardiovascular, lymphatic, integumentary (skin), digestive, respiratory, urinary, endocrine, male and female reproductive, and special senses (eye and ear). While the course's emphasis will be a study of the appearance of normal cells and tissues, selected abnormal/diseased tissues will be examined as well (e.g., bone osteoporosis, heart myocardial infarctions, neurological diseases, etc.) and functional correlations will be made.					
HESC341	**EPIDEMIOLOGY**	(2,0,0)2	4	FE		English
Course Content	This course aims to comprehend the importance of epidemiology science. Topics covered in this course include basic principles of epidemiology; measures of disease frequency; epidemiologic study designs: experimental and observational; bias; confounding; outbreak investigations. At the end of this course, students; Define what epidemiology is. Explains the development process of epidemiology in the historical process, gives examples of successful epidemiological studies. Explain the types of epidemiological studies. List the epidemiological indicators. tells the epidemiological indicators of Turkey. Defines incidence. Defines the prevalence. Explain the difference between prevalence and incidence.					

HESC342	**HEALTH EDUCATION AND DEVELOPMENT OF HEALTH**	(2,0,0)2	4	FE		English
Course Content	This course aims to enable the student to define the determinants that affect health and health behaviors, to apply health education programs using health promotion models and to develop healthy living behaviors in individuals, families and society. The concept of health promotion, its definition and causes and dimensions Diagnosis of health and social determinants of health The roles of the nurse in health promotion, Models used in health promotion: Health Belief Model, Transtheoretical Model, Models used in health promotion: Planned Behavior Theory, Social Cognitive Theory Health promotion and health policies Health promotion and health education Health promotion by age range Research in health promotion and health education.					
HESC343	**DISABILITY AND LIFE**	(2,0,0)2	4	FE		English
Course Content	This course consists of various physiotherapy and rehabilitation methods used in congenital or acquired disabilities. Lectures, group work, research, report presentation, the discussion will be conducted. This course covers the classification of the disabled, social policies and disability rights, disabled and employment, disabled and transportation-traffic, landscaping for the disabled, education of disabled individuals, disabled individuals and sports, protective approaches for the disabled. Students will gain the skills of determining the physiotherapy needs of disabled individuals, solving problems and making decisions, evaluating the disabled individuals and applying the necessary treatment approaches.					
HESC344	**HEALTH TOURISM**	(2,0,0)2	4	FE		English
Course Content	The aim of this course is to provide students with knowledge about health tourism and spa wellness practices. This course will cover the definition, scope, characteristics and historical development of medical tourism; the development in health tourism and reasons of them, factors that form the supply of health tourism; factors that affect the demand for health tourism, marketing and logistics in health tourism, policies of health tourism. Students will be able to define health tourism, will be able to discuss the importance of thermal tourism for Turkey. Will be able to compare elderly tourism within the scope of health tourism. will be able to discuss disabled tourism. Will be able to define the characteristics of businesses operating in the field of health tourism.					
HESC345	**MEDICAL TERMINOLOGY**	(2,0,0)2	4	FE		English
Course Content	This course introduces the vocabulary, abbreviations, and symbols used in the language of medicine. Emphasis is placed on building medical terms using prefixes, suffixes, and word roots. At the end of this course, it is aimed to enable students to learn the spelling, pronunciation and meanings of unique professional terms used in the medical profession and to record them when necessary. Students who successfully complete this course; He will be able to comprehend the terms of medical terminology, He will be able to understand and write the medical terms of the systems, He will be able to relate between medical terms and diseases, He will be able to gain the ability to direct patients with the knowledge he has learned, He will be able to gain the ability to record medical terms.					
HESC346	**HEALTH LEGISLATION**	(2,0,0)2	4	FE		English
Course Content	The general aim of the course; By examining the concepts and rules of health law, it is to produce solutions to the basic legal problems specific to this field. Explain the basic concepts and institutions of health law, explain the ways of legal protection by listing the rights of patients and physicians, list the conditions of legality of medical intervention, evaluate the legal responsibility arising from medical interventions, evaluate the legal responsibility arising from medical interventions, explain the criminal liability of physicians, determine the responsibility of the administration in health services, Organ Will be able to define the concepts of experimentation on human with tissue transplantation and explain the conditions, Will be able to list the basic concepts of drug law and the legal responsibility of the drug manufacturer.					
HESC347	**PREVENTIONAL HEALTH**	(2,0,0)2	4	FE		English
Course Content	Taking protective actions is as important as increasing the level of knowledge in the protection, development and maintenance of the physical, mental and social integrity of individuals and societies. Within the scope of our course, the concepts of health, disease and preventive health will be explained, the recommendations of the World Health Organization and the situation of our country will be discussed. Solutions will be offered to understand and spread the importance of preventive health in our society, and topics such as nutrition, physical activity and addiction, including environmental problems, will be covered. The spread of infection, the general characteristics and control of infectious diseases, as well as the strategies to be followed in immunization, the legal and political situation in the world, in the European Region, in Turkey and in our country will be discussed based on the Health 21 targets					
HESC348	**PROFESSIONAL ETHICS AND DEONTOLOGY IN HEALTH SCIENCES**	(2,0,0)2	4	FE		English
Course Content	The course aims; To develop the students' awareness of human ethic issues; To understand the importance of professional ethics for health sciences, to introduce the knowledge of the specific deontology of health sciences. Topics to be covered in the course; What is deontology? Definition and Principles of Ethics, what is a profession? Professional principles, Concepts of health and illness, Teamwork in health care, Health Professionals in the Community, Universal Declaration of Human Rights, Patient Rights, Laws and Regulations on the Management of Health Institutions, Euthanasia and Ethics, Organ Transplantation and Ethics, Geriatrics and ethics.					
HESC351	**INFECTION DISEASES**	(2,0,0)2	4	FE		English
Course Content	This course provides a broad understanding of infectious diseases, together with developing strategies for their control and treatment. The course will focus on the management of conditions such as hepatitis, Ebola, biowarfare agents, and COVID-19 (see our COVID-19 Learning Center) as well as related topics such as regimens and updates, special considerations when treating these patients, and more. The course includes topics on Infection formation, Infection signs and symptoms, Respiratory transmitted diseases, Blood-borne diseases, Fecal-oral transmitted diseases, Nosocomial infections, Disinfection antisepsis and sterilization, Personal protection methods, Isolation methods, Hospital infection control committee					
HESC352	**BASIC ECG**	(2,0,0)2	4	FE		English
Course Content	This course aims to provide healthcare professionals with the knowledge and skills necessary to conduct systematic ECG analyses of basic cardiac rhythms, and understand the diagnosis and treatment of arrhythmias in order to give the correct and immediate treatment to patients with arrhythmias. The course includes topics on derivation ECG, ECG waves and physiopathology, ECG recording and monitoring, ECG rhythm reading, recognizing pathological rhythms in ECG, AV blocks in ECG, Branch blocks on ECG, myocardial infarction on ECG, atrial and ventricular hypertrophies on ECG, Electrolyte changes in ECG. By completing this course successfully, students will be able to: Define the anatomy, physiology, and conduction system of the heart, a 12-lead ECG recording, and a bedside ECG monitor. Interpret the electrical activity and waves of an ECG.					
HESC353	**INTRODUCTION TO SYSTEMIC DISEASES**	(2,0,0)2	4	FE		English
Course Content	This course aims to provide an overview of the mechanisms and consequences of disease based on physiological dysfunction in the major organ systems. Each organ system will be introduced by a brief and basic review covering normal structure and function, followed by the pathology and some common disorders of each system. Discussion includes common clinical presentations of disease and the mechanisms underlying signs and symptoms. Diseases covered include cardiovascular, cancer, Parkinson's, Alzheimer's, hepatitis, infections, and diseases of the kidney and cardiovascular system (some topics may vary by quarter).					
MBIO101	**MICROBIOLOGY**	(2,0,0)2	4	FE		English
Course Content	The aim of this course is to inform students about principles of general microbiology and general aspects of the immune system. Understanding pathogenesis of infection diseases and the strategies to avoid infectious agents is one of the other aims. Introduction to microbiology and classification of microorganisms / Basic morphological structures of bacteria, Basic morphological structures of bacteria, Bacterial metabolism and growth, Bacterial genetics / General properties of Rickettsiae, Mycoplasmas, Chlamydiae and Spirochetes, General properties of viruses, General properties of fungi / General properties of parasites, Sterilization, disinfection Antibacterial agents, Environmental microbiology / Transmission ways and pathogenesis of infectious agents and normal flora, Transmission ways and pathogenesis of infectious agents and normal flora Introduction to immune system, Mechanisms of Innate immunity /, Infectious agents transmitted from gastrointestinal tract and food borne infections, Infectious agents transmitted from gastrointestinal tract and food borne infection disease.					
HESC354	**PRINCIPLES OF NUTRITION**	(2,0,0)2	4	FE		English
Course Content	This course aims to interpret the relationship between nutrition and health, and to provide information about nutrients (carbohydrate, protein, fat, water, vitamins and minerals), nutritional requirements in various age groups and various diseases. It provides theoretical information about the physiological functions, requirements and energy concepts of macro and micro nutrients that are important for human health and diseases. Within the scope of the course, it is aimed to understand the importance of macro (carbohydrate, protein, fat) and micro nutrients (vitamins and minerals) in adequate and balanced nutrition and body work, their chemical structures, metabolisms, functions, sources, requirements, inadequacy or health problems caused by their intake in toxic dose					
PATH350	**PATHOLOGY**	(2,0,0)2	4	FE		English
Course	This course aims to teach students the mechanisms of disease formation, the changes it creates in the tissue, and the undesirable effects of drugs. Information will be given on mechanisms of cell injury and cellular changes as a result of cell injury, inflammation and inflammatory processes, the functioning of the immune system in the formation of diseases, the undesirable effects of drugs and specific organ pathologies, basic concepts in neoplasia, etiopathogenesis of the tumor and the role of the pathologist in cancer treatment, body fluids and changes in body fluids in					

Content	drugs and specific organ pathologies, basic concepts in neoplasia, etiopathogenesis of the tumor and the role of the pathologist in cancer treatment, body fluids and changes in body fluids in diseases and blood flow disorders and infection stages, classification of infectious agents and changes in tissue caused by common infectious agents.

BCHM231	**BIOCHEMISTRY**	(2,0,0)2	4	FE		English
Course Content	This course involves the study of the molecular composition of living cells, the organization of biological molecules within the cell, and the structure and function of these biological molecules. The biological macromolecules which this course focuses on are proteins, polysaccharides, and polynucleic acids (DNA and RNA), including the monomeric units of these macromolecules. In this semester we will concentrate on the structures of these molecules, their functions, and the strong relationship between structure and function. The course will also examine the structure and function of lipids, a fourth important type of biological molecule and a major component of cell membranes. Along with the study of lipids, we will examine biological transport in membranes. Other topics to be examined in the course include the kinetics and catalytic mechanisms of enzymes. Methods and approaches used in biochemical research will be presented as will the biochemical basis of some disease states.					

Course Descriptions – IV: All Faculty Elective courses offered by other academic units.

Course Code	Course Title	Credit	ECTS Credit	Course Catego	Pre-requisite	Teaching Language
BIOL350	**BIOLOGY AND GENETICS**	(2,0,0)2	4	FE		English
Course Content	The course is an introduction to medical biology and genetics and methods used within these fields. The subject content is the following. The structure of the genome: chromosomes, chromosomal structure, and extrachromosomal inheritance. The molecular basis of transmission of genetic information: nucleic acids and proteins. DNA replication, DNA repair, mutations, recombination, transposition, transcription, and translation. Examples of gene regulation. Inheritance of genetic information: meiosis, sexual reproduction and classical genetics and transfer of DNA between bacteria. Gene technology: restriction mapping, genetic libraries, cloning, gene expressions to overproduce proteins of interest, DNA/RNA-sequencing, PCR. The possibilities, limitations and ethics of gene technology are discussed.					
PSYC231	**PSYCHOLOGY**	(2,0,0)2	4	FE		English
Course Content	The course will examine the different models upon which modern psychology has been built, along with such things as the history and origins of psychology, research methods, biological aspects of psychology, human development, perception, consciousness, learning, personality theory, and psychological disorders. This course includes the definition of psychology, the history of psychology, the fields of psychology (social psychology, clinical psychology, developmental psychology, etc.) and the introduction of psychology theories (behavioral theories, cognitive theories, existentialist theory, etc.) and the biological foundations of psychology, defense mechanisms, disability and psychology. It covers the subjects of intelligence and its theories, sensation and perception, memory, learning theories, human development, personality and theories, abnormal behavior, psychological investigation of motivation. The course covers development, personality, stress and health, psychopathology, therapy, and social psychology.					
PSYC386	**COMMUNICATION AND BEHAVIORAL SCIENCES**	(2,0,0)2	4	FE		English
Course Content	This course; definition, importance and basic functions of communication, types of communication, factors affecting communication, self-knowledge, ways of knowing oneself, practices of self-knowledge, listening and communication relations and communication networks in institutions, using I language, empathy, empathetic communication, behavior types, assertive behavior, passive behavior, manipulative behavior, techniques that facilitate communication with the patient, communication skills: therapeutic communication skills, approaches that prevent communication, communication with pediatric patients, communication with elderly patients, communication in some special cases, patients who refuse treatment, patients who are constantly present , aggressive patient, anxiety patient, introvert/depressive patient, terminal patient, patient/family experiencing loss and grief, stress management and conflict resolution.					