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## TRABZON UNIVERSITY

## ŞALPAZARI VOCATIONAL SCHOOL

# PROPERTY PROTECTION AND SECURITY DEPARTMENT CIVIL DEFENSE AND FIREFIGHTING PROGRAM

# COURSE CONTENTS FOR 2022-2023 EDUCATIONAL YEAR AND AFTER

	Programme of the	I. TERM						
#	CODE	COURSE NAME	TYI	o I or	T.	-	1	
1	ŞSSİ110	1 Firefighting and Sport Training	Z		U	L	K	ECT
2	ŞSSİ110	3 Introduction to Firefighting and Fire Safety	Z	1	2	0	2	3
3	ŞSSİ110.	First Aid	Z	2	0	0	2	3
4	ŞSSİ110°			2	1	0	2.5	4
5	ŞSSİ110		Z	2	2	0	3	4
6	ŞSSİ111		Z	2	2	0	3	4
7	ŞSSİ1113		Z	2	0	0	2	3
8	AITB100	1 Ataturk's Principles and Revolution History - I	Z	2	0	0	2	3
9	TDB1001	Turkish Language-I	Z	2	0	0	2	2
10	YDB1001		Z	2	0	0	2	2
11	KAR1001	Career Planning	Z	2	0	0	2	2
		- Caroot Hamming	Z	1	0	0	0	0
		H TIDA	Sun	n 20	7	0	22.5	30
#	CODE	COURSE NAME	- my ra		de la ja			
1		Ataturk's Principles and Revolution History - II	TYP		U	L	K	ECT
2	YDB 1002	Pricing Language-II	Z	2	0	0	2	2
3	TDB1000	Turkish Language - II	Z	2	0	0	2	2
4		Disaster Management	Z	2	0.	0	2	2
5	SSSİ1106	Information of Fire Department Equipment and Material-II	Z	3	0	0	3	4
6	SSSİ1108	Fire Equipment and Project Information	Z	2	2	0	3	4
7	\$SSİ1110	Fire Department Legislaton and Standards	Z	2	1	0	2.5	4
8	Grup-1	Optional Course-I	Z	2	0	0	2	3
9	Grup-1	Optional Course-II	S	-2	0	0	2	3
10	Grup-1	Optional Course-III	S	2	0	0	2	3
10	Grup I	Optional Course-III	S	2	0	0	2	3
		III, TERM	Sum	21	3	0	22,5	30
#	CODE	COURSE NAME	(DX/D)	Ι	T			
1	ŞSSİ2101	Firefighting Professional Practice	TYP	T	U	L	K	ECT
2	ŞSSİ2115	Professional Experience	Z	1	4	0	3	5
3		Fire Fighting Rules-I	Z	0	2	0	1	5
4	ŞSSİ2107	Search and Rescue Information-I	Z	2	2	0	3	4
5	ŞSSİ2111	CBRN	Z	2	2	0	3	4
6	Grup-2	Optional Course-I	Z	2	1	0	2.5	3
7	Grup-2	Optional Course-II	S	2	0	0	2	3
8	Grup-2	Optional Course-III	S	2	0	0	2	3
		- promise could in	S	2	0	0	2	3
		IV. TERM	Sum	13	11	0	18,5	30
#	CODE	COURSE NAME	TVD	TT.	TT	T		D or
1		Fire Fighting Rules-II	TYP	<u>T</u>	U	L	K	ECT
2	ŞSSİ2106	Search and Rescue Information-II	Z	2	2	0	3	4
3	ŞSSİ2108	Fire Safety	Z	2	2	0	3	4
4		Fire Criminology	Z	3	0	0	3	4
5		Hazardous Substances	Z	2	0	0	2	3
6		Optional Course-I	Z	2	0	0	2	3
7		Optional Course-II	S	2	0	0	2	3
8		Optional Course-III	S	2	0	0.	2	3
9		Optional Course-IV	S	2	0		2.	3
7								
9			Sum	2 19	02	0	213	30

		II, TERM OPTIONAL COURSES						
#	CODE	COURSE NAME	TYP	T	U	L	K	ECT
1	ŞSSİS1122	Emergency Management	S	2	0	0	2	3
2	ŞSSİS1124	Disaster and Emergency Psychology	S	2	0	0	2	3
3	ŞSSİS1126	Professional Ethics	S	2	0	0	2	3
4	ŞSSİS1128	General and Technical Communication	S	2	0	0	2	3
5	ŞSSİS1130	Disaster Education and Culture	S	2	0	0	2	3
6	ŞSSİS1132	Project Development and Management	S	2	0	0	2	3
7	ŞSSİS1134	Firefighting and Traffic Training	S	2	0	0	2	3
8	ŞSSİS1136	Digitalization in Firefighting	S	2	0	0	2	3
	经付款的证据	III. TERM OPTIONAL COURSES						
#		COURSE NAME	TYP	T	U	L	K	ECT
1	ŞSSİS2121		S	2	0	0	2	3
2		Industrial Fires	S	2	0	0	2	3
3	ŞSSİS2125	Administration and Organization	S	2	0	0	2	3
4	ŞSSIS2127	Earthquake Information	S	2	0	0	2	3
5	ŞSSİS2129	Leadership and Group Dynamics	S	2	0	0	2	3
6		The Survival Techniques in Nature	S	2	0	0	2	3
7	ŞSSİS2133	Geographic Information System in Disasters	S	2	0	0	2	3
8	ŞSSİS2135	Information and Communication Technologies	S	2	0	0	2	3
		IV. TERM OPTIONAL COURSES						
#		COURSE NAME	TYP	T	U	L	K	ECT
1	ŞSSIS2120	Professional English	S	2	0	0	2	3
2	ŞSSIS2122	Basic Electrical and Electronic Information	S	2	0	0	2	3
3	ŞSSIS2124	Building and Installation Information	S	2	0	0	2	3
4		Aircraft Fires	S	2	0	0	2	3
5	ŞSSİS2128		S	2	0	0	2	3
6	ŞSSIS2130	Volunteering Studies	S	2	0	0	2	3
7	ŞSSİS2132	Disaster and Emergency Legislation	S	2	0	0	2	3
8	ŞSSİS2134	Artificial Intelligence in Disaster and Emergency Situations	S	2	0	0	2	3
9	ŞSSİS2136	Fighting Addiction and Addiction	S	2	0	0	2	3
10	ŞSSIS2138	Technological Literacy	S	2	0	0	2	3



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### ŞALPAZARI VOCATIONAL SCHOOL

# PROPERTY PROTECTION AND SECURITY DEPARTMENT CIVIL DEFENSE AND FIREFIGHTING PROGRAM

COURSE CONTENTS FOR 2022-2023 EDUCATIONAL YEAR AND AFTER

## I. TERM (FIRST GRADE FALL SEMESTER)

# ATATURK'S PRINCIPLES AND REVOLOTION HISTORY- I

Concepts related to the Revolution and the Revolution. The State and its Elements, Evolution, Reform, the Coup d'état of the Government, the Revolution, the Revolution.; The reasons that prepared the Turkish Revolution. The collapse of the Ottoman State, internal causes, External causes.; The threats faced by the Ottoman State due to its geopolitical situation. Innovation movements in the Ottoman Empire. Reforms before the Tanzimat.; Tanzimat Edict, Reform Edict, I. Constitutional Monarchy, II. Constitutionalism.; Ideas in the last period of the Ottoman Empire (Ottomanism, Islamism, Westernism, Turkism.) The coming to power of the Union and Progress Party. The March 31 event.; Tripoli War, Balkan Wars, the causes of the First World War and the beginning of the war.; Participation of the Ottoman Empire in the War and the Fronts, Fronts and Results.; Treaty of Sharing the Ottoman State (Bosphorus Treaty, London Treaty, Sykes Picot Treaty, St. Jean de Maurienne Treaty.) End of World War I, Armenian events, Armistice of Mudros.; National Struggle period, State of the Nation and Country against the Occupations. Societies and Activities.; Mustafa Kemal Pasha's arrival in Istanbul and his view of the situation, Mustafa Kemal Pasha's departure to Samsun. Activities of Mustafa Kemal Pasha in Havza, Amasya Circular.; Erzurum Congress and its importance, Balıkesir and Alaşehir Congresses. Sivas Congress and its importance, other congresses during the National Struggle; Amasya Meetings, meeting with the commanders in Sivas. Arrival of the Representative Committee to Ankara. Meeting of the last Ottoman Parliament of Deputies, National Pact (National Treaty).; The opening of the Turkish Grand National Assembly, its characteristics. Press in the National Struggle.; Riots against the Turkish Grand National Assembly. Projects to share Turkey.

## TURKISH LANGUAGE- I

What is Language? The importance of the place of language in the life of the nation as a social institution.; The place of the Turkic Language among the languages of the world.; Development and historical periods of the Turkic Language.; Reading-comprehension; Reading-comprehension; Expression Disorders; Expression Disorders; Oral Expression (rules of spoken language, correct breathing techniques, articulation disorders); Oral Expression (emphasis, intonation, stop); General information about Write Types; Writing Process; Petition and resume writing; Petition and resume writing.



#### **ENGLISH-I**

Introduction: Information about the Course Book and Course Objectives, Giving Essential Information about the course, Sharing Ideas about Learning a foreign language, A) Speaking: Introducing yourself B) Vocabulary: Occupations C) Grammar: The Present Tense of Be, D)Listening: Introductions, Asking for More Personal Information E)Reading and Writing:Occupations, Writing a letter, A) Speaking:Asking for and Giving Personal Information, Compiling a Directory B) Vocabulary: Personal Information C) Grammar: The Present tense of Be, D) Listening: People Asking for and Giving Personal Information E) Reading and Writing:Personal Details, A) Speaking:Talking about Personal Possessions, Role Play B) Vocabulary:Possessions C) Grammar: Demonstrative Adjectives, D) Listening:Asking and Talking about Photos and Possessions E) Reading and Writing:Personal Possessions, A letter about your partner's personal info, A) Speaking:Expressing likes and dislikes, Role Play B) Vocabulary:Types of Music C) Grammar: The Simple Present Tense (1), D: Listening: Talking about Music and Favourite Types of Music E) Reading and Writing: Likes and Dislikes, A letter about your Friends, A) Speaking: Describing Activities, A Board Game B) Vocabulary:Leisure Activities C) Grammar: The Simple Present Tense (2), D) Listening: Talking about Weekend Activities E) Reading and Writing: What do you do for fun? A Letter about Your Friends, D) Speaking: Talking about Abilities, A Survey on Skills B) Vocabulary: Abilities c) Grammar: Can and Can't, D) Listening: Talking about What They can and can't do E) Reading and Writing: People's abilities, A Letter about Your Friends, Overall Revision of Topics for Final Examination.

#### **FIRST AID**

First aid regulation, Basic information about the body, General first aid information, Evaluation of the sick-injured and the scene, Basic life support, first aid in cases of bleeding and shock, first aid for injuries, First aid in fractures, Dislocations and sprains, burns first aid for frostbite and heat stroke, first aid in poisoning, first aid for animal bites, First aid for foreign body intrusion into eyes and nose, first aid in suffocation, first aid in disorders of consciousness, transport techniques of sick casualties.

## OCCUPATIONAL HEALTH AND SAFETY

Occupational health and Safety, purpose, definition, basic principles, main principles, benefits of job security, introduction of regulations, labor law, occupational health promotion, dangers, precautions to be taken, dangers, employer's and employee's liability, the introduction and precautions of safety signs work accidents, occupational diseases, noise, vibration, personal protective equipment introduction and benefits, ergonomics, definition and definition of risk and its evaluation.

# INFORMATION OF FIRE DEPARTMANT EQUIPMENT AND MATERIAL-I

Importance and classification of equipment use in firefighting, Features and principles of use of firefighter personal protective clothing, Importance, features and types of fresh air breathing apparatus and masks, Equipping, removing and maintenance of fresh air breathing apparatus and masks, Characteristics and classification of fire extinguishing agents, Use of fire extinguishing agents, Types of lances used in firefighting, Types of hoses and their use, Equipment used in water supply and evacuation, Importance and types of ventilation equipment, Importance and types of lighting equipment, Features of equipment used to produce foam, Types of auxiliary equipment used in firefighting, Auxiliary equipment used in fire brigade use and cleaning.

## FIREFIGHTING AND SPORT TRAINING-I

General information about firefighting sports, Preparing the body, fitness track, basic postures, B firefighting gymnastics movements, climbing wall crunches, rope climbing, firefighting sports and gar 100 meters hose opening.

## INTRODUCTION TO FIREFIGHTING AND FIRE SAFETY

Fire brigade history, The past situation of the fire brigade, The current situation, The situation of the fire brigade in the world countries, Fire security, Protection and prevention in fire safety, Extinguishing in fire safety, Duties of fire brigade and firefighter, Firefighting organizations, Introduction of working areas, Examination of laws and regulations.

## INFORMATION OF COMBUSTION AND FIRE

Combustion and its conditions, natural heat sources, artificial heat sources, flammable substance according to its flammability, Flammable substance according to its nature, burning types, combustion products, gases released during combustion, terms related to combustion, fire, heat transfer, fire stages.

## CIVIL DEFENSE AND PROTECTION INFORMATION

Definition and historical development of civil defense, Civil defense legislation, Mobilization activities, Evacuation and spacing, Sensitive areas and their levels, Civil defense services - headquarters service-rescue service - first aid service - social aid service - security traffic service - fire service - hospitals service—technical repair service, Civil defense plan preparation, Civil defense plan preparation, Protection from CBRN threats, Warning alertsDefinition and historical development of civil defense, Civil defense legislation, Mobilization activities, Evacuation and dilution, Sensitive areas and stages, Civil defense services, headquarters service, rescue service, first aid service, outreach service, safety traffic service, fire service, hospitals service, technical repair service, Preparing a civil defense plan, Preparing a civil defense plan, Protection from CBRN threats, Warning alarms and shelters, Fire protection, Education and application.m and shelters, Fire protection, Education and practice floor.

#### CAREER PLANNING

Career journey has started, first stop: Career center, Intelligence and Personality, Personal characteristics, Key to making a difference in career path: Skills, What is a Career, How Do I Prepare for My Career? Non-Governmental Organizations — National, Non-Governmental Organizations — International, Sector Days - Public Sector, Sector Days - Private Sector, Industry Days- Academy, Sector Days-Entrepreneurship, Writing a Resume, Course Evaluation.

## II. TERM (FIRST GRADE SPRING SEMESTER)

## ATATURK'S PRINCIPLES AND REVOLOTION HISTORY- II

Abolishment of the Sultanate and Lausanne Peace Process.; Elections and II. Opening of the Turkish Grand National Assembly.; Turkish Revolution Movements (Political Revolutions); The First Political Parties of the Republic Period, the Izmir Assassination, the Menemen Incident.; Reforms in Law.; Revolutions in the Field of Education (Unification of Education, Letter Revolution).; Cultural Revolution (Studies in the field of History, Language and Fine Arts).; Cultural Revolution (Studies in the field of History, Language and Fine Arts); Regulations in the Economic Field, Studies for Creating a National Economy; Atatürk era foreign policy of the Republic of Turkey. Foreign Policy Events in the 1923-1932 Period; Foreign Policy Events in the 1932-1939 Period. Characteristics of Ataturk Era Foreign Policy; World War II and Turkey II. Turkey in terms of World War II Results.; Atatürk's Principles (Republicanism, Nationalism) Atatürk's Principles (Populism, Secularism.) Atatürk's Principles (Statism, Revolutionism.) Complementary Principles; Atatürk's Principles (Republicanism, Nationalism.) Ataturk's Principles (Populism, Secularism.) Atatürk's Principles (Statism, Revolutionism.) Atatürk Principles.

## TURKISH LANGUAGE- II

Spelling and punctuation; Spelling and punctuation; Sounds in Turkish and their classification; Voice features of Turce; What is a paragraph? How to write? Writing text based on knowledge and thought; What is a report? How to write? Writing a diary and introducing a diary; What is an experiment? how to write? biography, autobiography and memoir promotion; story, description writing; novel, theatre; critical thinking, prepared and impromptu speech.

#### **ENGLISH-II**

Review: The Present Tense of BE, The Simple Present Tense, CAN / CAN'T (Ability), Speaking: Describing Present Activities, A Guessing Game B) Vocabulary: Clothing C) Grammar: The Present Continuous, D) Listening: Describing oneself and other people E) Reading and Writing: What people are doing, A Text Message, Unit 8) A) Speaking: Describing Your Home and Room B) Vocabulary: Household items C) Grammar: There is and There are, D) Listening: Asking and Talking about where things are located E) Reading and Writing: Describing Rooms, A Text Message, A) Speaking: Giving Directions, Asking Directions in Your Neighborhood B) Vocabulary: Places around Town C) Grammar: Giving Directions, D) Listening: People Preparing Recipes E) Reading and Writing: Directions, A Text Message, A) Speaking: Talking about Food, A Role Play B) Vocabulary: Food and Drink C) Grammar: Count and Non count Nouns / Some and Any, D) Listening: Asking for Directions E) Reading and Writing: Food and Drink, A Letter about A Trip, A) Speaking: Talking about the Past, a Survey about where people were B) Vocabulary: Everyday Places C) Grammar: The Past Tense of BE, D) Listening: Talking about where people were E) Reading and Writing: Past Activities and Places, A Letter about A Trip, A) Speaking: Talking about Past Activities, A Board Game B) Vocabulary: Leisure Activities C) Grammar: The Simple Past, D) Listening: Talking about Weekend E) Reading and Writing: Past Activities, A Letter about A Trip, Overall Revision of Topics for Final Examination

#### DISASTER MANAGEMENT

Basic concepts of disaster management, Types of disasters, major disasters in the world and in Turkey, Disaster management systems in some countries, The history of disaster management in Turkey and legislation, Integrated disaster management and stages, Triage in disasters

## FIREFIGHTING AND SPORT TRAINING-II

The importance and classification of equipment use in firefighting, An overview of the types of firefighting vehicles, Firefighting first response vehicles, Features of ladder vehicles, Features of rescue vehicles, CBRN Vehicles and equipment, Water supply vehicles, Special vehicles, Support vehicles Types and installation of airbags, features of cutters and types of hydraulic separators, cutters and cylinders, hammers and drills; features and types, Jacks and ladders; Features and types, Generator, jump pads and supports, Seismic acoustic listening devices and video search devices, Other materials used in rescue operations.

## FIRE EQUIPMENT AND PROJECT INFORMATION

Units of measure, To be able to read the project and understand its content, principles of preparing fire extinguishing and smoke evacuation projects, To be able to read the project and understand its content, Overview of fire installations in buildings, Water extinguishing systems, water tanks and resources, fire pumps, fixed piping and fire cabinets, hydrant system, sprinkler system, fire brigade connectors, Fixed Automatic Extinguishing Systems with Foam, Gas and Dry Powder, Smoke evacuation system, Pressurizing system.

## FIRE DEPARTMENT LEGISLATON AND STANDARDS

What is the law, statute, regulation and directive, Municipal law, Metropolitan municipality law, Municipal fire department regulation, Voluntary fire regulations, Chimney cleaning and inspection regulation and Regulation on business opening and working licenses, Regulations and annexes on fire protection of buildings, Firefighter professional standards, EN 54 standards, EN 54 standards, Fire safety standards (TS 12259-1, TS 14520-1), Fire safety standards (TS 13501-1).

#### **OPTIONAL-I**

It covers the selection of one of the eight courses in the elective course pool.

#### **OPTIONAL-II**

It covers the selection of one of the eight courses in the elective course pool.

#### **OPTIONAL-III**

It covers the selection of one of the eight courses in the elective course pool.

## II. TERM OPTIONAL COURSES (FIRST GRADE SPRING SEMESTER)

#### **EMERGENCY MANAGEMENT**

Emergency management basic concepts, Hazard hunting and risk analysis, emergency management legislation in Turkey, Disaster and emergency types, Emergency action plan, Incident management in emergency situations, Emergency communication, Evacuation plan, Field and desk application, Emergency management for individuals with special needs, Emergency psychology.

## DISASTER AND EMERGENCY PSYCHOLOGY

Disaster Psychology and Basic Concepts, Basic principles in psychosocial practices, Stages of disasters and traumatic life events affecting the society, The impact of disaster and emergency on children and adolescents and intervention approaches, The impact of disaster and emergency on children and adolescents and intervention approaches, Effects of disasters on adults, Post-traumatic stress disorder and acute stress disorder, The psychology of grief and loss, Psychological soundness, Secondary traumatic stress symptoms and coping methods, Psychosocial intervention approaches, Psychology of civil defense and firefighters, Burnout syndrome, Disaster ethics

#### PROFESSIONAL ETHICS

The concept of ethics, The concept of ethics, morality, moral theories, moral decision making, Civil defense history and ethics, Firefighting history and ethics, Professional ethics, Rights of the victim, Rights of personnel in the field of civil defense and fire brigade, The consequences of professional corruption and unethical behavior, The concept of social responsibility, Disaster management and ethics, Case discussions in the field of civil defense and firefighting.

## GENERAL AND TECHNICAL COMMUNICATION

Basic contact information, communication types and barriers, communication in organizations, official, private and business articles, technical communication, communication with form editing and graphic communication information technologies, talking on the phone, personal relationships, Phobia activities, marketing, ego states, group discussions.

#### DISASTER EDUCATION AND CULTURE

Basic concepts about disasters. Things to do before disasters; Dangers around us family disaster and emergency plan, meeting areas, emergency phones, disaster and emergency bag Correct behaviors to be done during disasters, Things to do after disasters; evacuation, volunteer activities, Risk and mitigation studies in disasters, Disaster preparedness studies, Disaster response studies, Improvement studies in disasters, From the flood and overflow From landslid, Avalanche, Earthquake, Fire Protection methods from CBRN effects

#### PROJECT DEVELOPMENT AND MANAGEMENT

Sharing the syllabus with the students and creating groups for group projects, What is a project? What is the project needed for? Project examples, Project development steps (Analysis, Planning, Organization, Control, Closing), Analysis Phase, Problem Tree, Creating Goal Tree, Logical Framework Matrix, Planning Phase, How to Write a Scientific Project, Literature Review How to Do?, Literature Search, Project writing.

## FIREFIGHTING AND TRAFFIC TRAINING

Traffic Rules, Fire Trucks, Bastion of fire trucks, Duties and responsibilities of the district personnel, Regulation on vehicles with the advantage of pass, Vehicle safety at fire stations, Incident scene safety of fire trucks, Safety of fire trucks in traffic, Material and personnel safety in fire trucks, The place of the fire brigade in city planning.

## DIGITALIZATION IN FIREFIGHTING

New generation technologies used in disasters and emergencies, Examples of digitalization used in disasters and emergencies, AFAD volunteering project, Prepare for disasters project, AFAD accreditation, AFAD Emergency Mobile Application AFAD ARAS, AFAD RED, TAMP Turkey Disaster Response Plan, AYDES Disaster management decision support system, IRAP, digital transformation in Fire Brigade services, examples of Metropolitan Municipality.

## III. TERM (SECOND GRADE FALL SEMESTER)

#### FIREFIGHTING PROFESSIONAL PRACTICE

Report writing and preparation, use, maintenance, repair of the vehicles used in the fire department and the materials on the vehicles, the use, maintenance, repair of the vehicles used in AFAD and the materials on the vehicles, the use, maintenance, repair of the vehicles used in the RFF and the materials on the vehicles, Vehicles used in forest firefighting and the use, maintenance and repair of materials on vehicles, Equipment and materials used in fire safety, NGO function in disaster response, Duties and responsibilities of civil defense in public institutions, Tools and materials used in industrial fires.

## PROFESSIONAL EXPERIENCE

To provide students with the opportunity to test their professional interests before starting their business life, to enable students to develop their professional skills with the ability to apply the theoretical knowledge they have obtained, to contribute to the adaptation of students to the working environment from the academic environment and to increase the sense of responsibility of the students.

## FIRE FIGHTING RULES-I

Quenching methods; by cooling, suffocating, removing fuel, preventing, Extinguishing agents; water, foam, CO2, dry chemical powders, alternative gas extinguishers, Selection of extinguishing agent, choice of intervention with appropriate lance, water treatment methods, Referral organization and communication; notification, crime scene communication, information gathering, Crime scene security studies; vehicle bastions and correct placement, wearing personal protective equipment, vehicle material and environmental safety, Types of intervention; prepared intervention, unprepared intervention, rapid intervention, Types of intervention; side by side intervention, cascade intervention, independent intervention, Types of intervention (establishment of a 9-person team and duties of team personnel), Types of intervention (teamwork of 7 people and duties of team personnel), Types of intervention (internal interventions and forms of progress in closed areas), Types of intervention (internal interventions and forms of progress in closed areas), Hazards at the fire place.

## SEARCH AND RESCUE INFORMATION-I

Search and rescue concepts, importance, team and tasks, Search and rescue in closed and smoky environments, Rescue in cases of being stuck in an elevator, Causes of traffic accidents, vehicle components and classification, Traffic accident intervention, crime scene security studies, Response to traffic accidents and rescue of victims, Equipment used in traffic accidents, Search and rescue building structures and building collapses in the urban area, Search and rescue team and tasks in the urban area, crime scene management, Search and rescue equipment and technical specifications in the urban area, Search and rescue casualty search and rescue methods in the urban area, Avalanche information, avalanche classification, Avalanche-inducing reasons, Avalanche search and rescue methods.

#### **CBRN**

CBRN entry and related legislation, History of chemical events, classification of chemical agents according to their physical state and volatility, Classification of chemical agents according to their toxicological properties, protection from chemical events, Biological threats, propagation ways of biological agents, history of biological events, biological agent properties, Classification of biological agents, Protection from biological events. History of radiological events, types of radiation, the effect of radiation on human health and protection, Introduction to nuclear threats, history of nuclear events, the sudden effects of nuclear weapons, Residual effects of nuclear weapons, protection from nuclear threats, Suspicious mail and packages, Warning and alarm, shelters, CBRN personal protective equipment and standards, Detection and diagnostic technologies, CBRN crime scene management, Decontamination

#### **OPTIONAL-I**

It covers the selection of one of the eight courses in the elective course pool.

## **OPTIONAL-II**

It covers the selection of one of the eight courses in the elective course pool.

#### **OPTIONAL-III**

It covers the selection of one of the eight courses in the elective course pool.



## III. TERM OPTIONAL COURSES (SECOND GRADE FALL SEMESTER)

#### FOREST FIRES

Definitions and concepts, forest fire statistics, Activities of the General Directorate of Forestry and fire meteorology stations, Classification of forest fires, main problems of fire hazard rates, Sources using fire hazard indexes, The course and spread of forest fires, Regulation of flammable material in eliminating large forest fires, Fire protection principles and methods, Fighting forest fires and the importance of protective equipment, Forest fires and fire seasons in our country, The main principles and methods of management and administration in extinguishing large forest fires, Factors affecting the selection of hand tools used in fire extinguishing and remedies to reduce energy consumption, The shipment of living and non-living assets recovered after fire, Legal obligations in response to forest fires

#### INDUSTRIAL FIRES

Principles of fire safety, Fire hazard terminology, Properties of hydrocarbons, properties during combustion, Engineering and technical characteristics of petroleum products, Fire and explosion technical characteristics of frequently used chemicals, Environmental effects and possible precautions, Relevant laws and regulations, Case studies

## ADMINISTRATION AND ORGANIZATION

Definition and characteristics of management and manager, Decision making, decision types, Decision-making stages, Definition of planning, plan and plan types, Description of the organization, Principles of the organization, Organization charts, Executive, Human Resources Management, Career planning, Performance enhancement and evaluation, Employee training and selection, Control and control types, Organization culture, Definition and principles of total quality management.

## EARTHQUAKE INFORMATION

Earthquake definition and basic concepts, Earthquake magnitude, determination of earthquake intensity and focal point, The seismicity of our country, Major earthquakes in the world, Classification of structures, Earthquake safety in buildings, Earthquake resistant designs, Earthquake safety, Earthquake first aid and first aid, Legal regulations.

#### LEADERSHIP AND GROUP DYNAMICS

Leadership and concepts and definitions related to leadership, Basic features and principles required for leadership, Leadership formation, leadership theories, Leadership and group, Group communication structure, Leadership functions, Major leadership concepts, Leadership models, Leadership practices in terms of management, Leadership in their activities, group management, Leaders' responsibilities, Current problems and solution suggestions of leadership in sports events.

#### THE SURVIVAL TECHNIGUES IN NATURE

Survival supplies, How to light a fire, camp Fire, types and preparation of tinder, Fishing and methods, species of fish, feed and cooking, Building and shelter types, Edible seeds and fruits, poisonous plants, Desert types, desert travel and appropriate clothing, Life in life Edible invertebrates, poisonous invertebrates, First aid for injuries, Establishing a safe camping area, Adobe house made of grass, log hut, tent installation, Disruption of the camping area, Water in nature; sources, treatment, where to search, diseases, Search and rescue signs; aircraft management, morse code, use of marker, How to cross the creek, how to make a bridge, raft construction.

## GEOGRAPHICAL INFORMATION SYSTEM IN DISASTERS

Geographic information system concept and scope, GIS history, GIS data types, GIS data models, basic functions of GIS, analysis in GIS I, analysis in GIS II, use of GIS in disaster management, Remote sensing Technologies, UA in disaster management Use of, GIS-based location determination and mapping in disaster management, mass movement analysis with GIS, drought analysis with GIS, earthquake and water management analysis with GIS.

## INFORMATION AND COMMUNICATION TECHNOLOGIES

Introducing the basic concepts of Information Technologies, basic hardware and software components in a computer system, purposes of the operating system, Using the operating system and performing its settings at a basic level, Internet technology and concepts, Giving basic information about the introduction and use of a word processing program, Word processor toolbars and commands, Word processor toolbars and commands, Word processor toolbars and commands, Lesson Repetition, Introduction and use of a spreadsheet software, Introduction and use of a spreadsheet software, Introduction and use of a spreadsheet software, Introduction and use of a spreadsheet software, Introduction and use of a presentation software

## IV. TERM (SECOND GRADE SPRING SEMESTER)

#### FIRE FIGHTING RULES-II

Ventilation, aspiration and ventilation in indoor fires, Firefighting related concepts, fire response in high-rise buildings, Rescue operations from fire area, evacuation, Special fires building fires, Special fires forest fires, Special fires subway, tunnel and covered bazaar Fires, Special Fires, Gas Fires, Specialty Fires, Fuel Fires, Specialty Fires, Specialty Fires, Specialty Fires, Aircraft Fires, Viewing the works at the fire site, Examination of the fire scene, recovery and delivery of the scene, Fire scene information filling in the forms, returning to the station and preparing the fire report.

#### SEARCH AND RESCUE INFORMATION-II

The importance of search and rescue in rural areas, personal protective equipment, ropes, nodes, various equipment and features, high landing methods, climbing methods, search and rescue methods in wells, stretcher binding and carrying methods, casualty download methods, surface search and rescue principles, surface search and rescue methods, surface search and rescue equipment and technical specifications.

#### **FIRE SAFETY**

Fire safety and its importance, Duties of the fire department on fire safety, General provisions, use of buildings and hazard classification, General fire safety provisions regarding buildings, Escape routes, escape stairs and special cases, Regulations on Building Sections and Facilities, Electrical Installation and Systems, Smoke Control Systems, Fire Extinguishing Systems, Storage and Use of Hazardous Substances, Fire Safety Responsibility, Teams, Training, Inspection, Cooperation, Allowance and Internal Regulations, Provisions to be Applied to Existing Buildings, Annexes of the regulation on fire protection of buildings.

## FIRE CRIMINOLOGY

Criminology definition, criminal investigations, definition of the evidence, material and moral evidence, crime scene investigation methods are random, spiral, circular and grid method, where evidence can be found, private and commercial expressions, causes of fire and sabotage, vandalism, fires caused by revenge, terror and commercial concerns, crime scene Investigation, collecting evidence, packaging and labeling, accelerators and retardants, signs of use and the evidence and findings they left behind, investigating automobile fires, investigating residential fires, investigating factory fires.

## HAZARDOUS SUBSTANCES

Dangerous materials, usage areas, Dangerous goods classification, Current regulations on chemicals and dangerous substances in our country, Explosives, dangerous gases, Flammable liquids, flammable solids, Oxidizing agents and organic peroxides, radioactive materials, Corrosive substances, other dangerous substances, Dangerous goods symbols and plates, ADR (HIN) danger numbers, NFPA 704 coding, EAC coding Storage of dangerous goods and label reading, Hazardous substance identification guide use

#### **OPTIONAL-I**

It covers the selection of one of the ten courses in the elective course pool.

#### **OPTIONAL-II**

It covers the selection of one of the ten courses in the elective course pool.

#### **OPTIONAL-III**

It covers the selection of one of the ten courses in the elective course pool.

## **OPTIONAL-IV**

It covers the selection of one of the ten courses in the elective course pool.

# IV. TERM OPTIONAL COURSES (SECOND GRADE SPRING SEMESTER)

## DISASTER AND EMERGENCY LEGISLATION

Social order rules and legal rules, source and classification of legal rules, constitutional principles and fundamental rights and responsibilities, private law and public law, branch, norms, hierarchy, Basic legal regulations regarding emergency and disaster management, laws on emergency and disaster management, regulations on emergency and disaster management, Statutory decrees, ministerial decrees and regulations on emergency and disaster management.

#### PROFESSIONAL ENGLISH

English equivalents of the basic concepts of fire brigade, acquiring firefighting terminology, terms of fireburning knowledge, Learning not only the terms related to the profession, but also the technological developments through literature review to develop the presentation skill and to make guiding studies in determining the working areas of the students in the professional life.

## BASIC ELECTRICAL AND ELECTRONIC INFORMATION

The importance of electrical energy, effects of electric current, electrical circuit values and units, measuring current and voltage, resistance and calculation of a conductor, Ohm's law resistance connections, Kirsoff's laws, direct current, alternating current and current sources, work and power in electrical circuits, first aid in electric shocks, precautions against electrical burns, effects of electric current on human, precautions against electrical fires.

## **BUILDING AND INSTALLATION INFORMATION**

What is structure? What is building information? Definition, classification of structures, What is a chimney? Definition, what are its types, Examination of chimneys according to their functions, Definition of Roofs, Types of Roofs Examination, What is a ladder? Stairs according to the materials they are made of, Types of stairs, Carrier systems, Architectural project sheets, Indoor installations.

#### AIRCRAFT FIRES

Aircraft types, passenger planes, cargo planes, military aircraft, fumigation and sports aircraft, helicopter, helicopter landing aircraft, fuel tanks, fuel types, aircraft accidents (lightly damaged accidents, heavily damaged accidents, crash crash sites, approach procedures, jump pad), developing the fire brigade and approaching the plane (the structure of the terrain, escaping passengers, wind direction, explosions, the position of the plane, missiles and bombs, radar, color coding in military aircraft, canopy, ways to open the canopy, disabling the batteries, ejection seat, pilot out extraction), collecting information in aircraft fires, response method in aircraft fires, potential hazards in aircraft fires.

#### FIRES AT SEA

Basic fire prevention and fire fighting training (fire fighting organization on board, locations of fire fighting devices and emergency escape routes, elements of fire and explosion (fire triangle), ignition types and sources, flammable substances, fire hazards and fire spread, the need for constant attention and alertness to fire, Things to do against fire on board, fire and smoke investigation and automatic alarm systems, Extinguishing agents suitable for classification and use of fire, firefighting equipment and its location on the ship, things to learn, fixed facilities, fire fighting equipment (fireman equipment), personal equipment, fire fighting vehicles and equipment, fire fighting methods, fire extinguishing agents, fire fighting procedures and procedures, use of breathing apparatus for fire fighting and effective rescue.

#### **VOLUNTEERING STUDIES**

Management and organization concepts, the concept of volunteering and volunteer management, basic areas of volunteering, Project development related to volunteer work and participation in volunteer work in the field, ethics in volunteer work, moral, religious, traditional values and principles, public institutions, Participation in voluntary work in local governments and non-governmental organizations, risk groups and volunteering in the community, immigrants and volunteering.

## FIGHTING ADDICTION AND ADDICTION

Basic concepts and definitions associated with addiction, Types of addiction (Substance, Technology, Alcohol, Cigarette etc.), Causes of addiction, Risk factors and protective factors in addiction, Psychological factors associated with addiction, Social factors associated with addiction, The role of social work in addiction, Addiction prevention programs, Approach to the addicted person, Treatment in addiction programs, Social therapy in addiction, Rehabilitation models in addiction, Addiction-related policies. Interagency collaborations in the fight against addiction

### **OUTPUT PROGRAM**

- 1) Has basic legal knowledge about civil defense, fire brigade, disasters, emergencies and occupational health and safety, and can use the principles of basic laws and regulations in the relevant field.
- 2) They can follow the structures and building technologies produced according to the developing technology, and learn to examine them in terms of fire and seismicity.
- 3) Have knowledge of CBRN hazards in Civil Defense and Firefighting and can participate in response organizations against CBRN hazards.
- 4) They can participate in response organizations in civil defense and firefighting incidents. They can save lives and property by learning fire intervention and search and rescue methods.
- 5) They can apply their knowledge and skills in the field of civil defense and firefighting.
- 6) Personnel working in civil defense and firefighting can perform the stages of post-intervention incident investigation, investigation, damage detection and reporting.
- 7) In case of emergency and disaster, he can apply basic first aid and techniques and correctly manage the psychological situations in which he will be confused.
- 8) By using a foreign language (English), he can follow the information related to his field and communicate with his colleagues.
- 9) Behavior according to general moral and professional ethical values.
- 10) They can gain the physical competence required in civil defense and firefighting, work collaboratively within the group, use interpersonal communication effectively and lead the group when necessary.
- 11) Have knowledge about the properties of tools and materials used in civil defense, firefighting and occupational health and safety. Have the skills to use in operations and maintain the materials. Be able to follow technological developments in related fields.
- 12) Has fire prevention competence in firefighting and can conduct exercises and training in the relevant field.
- 13) Have knowledge of and use artificial intelligence and digital platforms in civil defense, firefighting, occupational health, emergency and disaster issues. Be able to follow the technological developments in the related field.
- 14) Knows the traffic rules. It can ensure traffic safety of fire trucks at the station, at the scene and on the go.
- 15) Can do literature review on civil defense, fire brigade, emergency and disasters and develop projects by following up-to-date information.
- 16) Can prepare, implement and evaluate risk and harm reduction, preparedness, response and recovery plans in the field of civil defense, firefighting, emergency and disaster.
- 17) Have information about volunteering activities and participate in volunteering activities

#### TECHNOLOGICAL LITERACY

"What is technology?, What is technological literacy? Basic concepts of technological literacy", Introduction of Web 2.0 technology, current web 2.0 technologies, use of web 2.0 technologies in education, sample applications, How to learn effective presentation techniques? Things to do before the presentation, presentation strategies, technologies that can be used for effective presentation, Current education applications, Google education tools, Google doodle, Google maps, Google driver, gmail, Current education applications, smart boards, technologies that can be used in smart boards, software and tools used for smart boards, Current education applications, mobile devices, technologies used in mobile devices, mobile applications, Current technologies used in education, field-specific technologies, use of educational technology in the educational environment, Media literacy, basics of media literacy, mass communication, social communities, virtual world, Internet and technology security, using technology and the internet safely, possible threats and solution suggestions, security in educational Technologies, What is a storyboard? How is it prepared? Digital story planning, design and evaluation with pictures, use of pictures and videos in education, The use of the Internet in education, the use of information and content on the Internet in education, the legal usage rights of the information on the Internet, the provision of educational content from the Internet, distance education Technologies, distance education Technologies, distance education Technologies

# ARTIFICIAL INTELLIGENCE IN DISASTER AND EMERGENCY SITUATIONS

Basic Concepts, History and Philosophy of Artificial Intelligence, Usage Areas of Artificial Intelligence, Problem Solving with Artificial Intelligence and Introduction to Search Algorithms, Search Algorithms Without Using Problem Information, Heuristic Search Algorithms, Expert Systems, Introduction to Subbranches of Artificial Intelligence, Artificial Neural Networks, Use of Technology in Disasters, Use of Artificial Intelligence in Disasters, Examples of Use of Artificial Intelligence in Disasters, Writing an Artificial Intelligence Project, Developing an Artificial Intelligence Project.

