



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Chemical Biological Radiological Nuclear Components							
Course Code		ADY108		Course Level		Short Cycle (Associate's Degree)			
ECTS Credit	2	Workload	50 (Hours)	Theory	2	Practice	0	Laboratory	0
Objectives of the Course		The students who have mastered the historical development of civil defense and civil protection, citizens and public institutions have practical knowledge about methods of protection against CBRN events.							
Course Content		Definition and historical development of civil defense, Civil protection, Definition of chemical warfare, General separation of chemical warfare substances, Personal cleaning from chemical warfare substances, Definition and characteristics of biological warfare agents, Radiation symptoms, Main principles in radiation protection and precautions to be taken, Nuclear weapons and classic weapons differences, atomic and hydrogen bombs, effects of nuclear weapons, warning alarm signs, shelters, hiding and blackout.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion					
Name of Lecturer(s)									

Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	70

Recommended or Required Reading

1	Istanbul Fire Department Dangerous Chemicals Textbook
2	Instructor lecture notes

Week	Weekly Detailed Course Contents	
1	Theoretical	Definition and historical development of civil defense
2	Theoretical	Civil protection
3	Theoretical	Definition of chemical warfare, general separation of chemical warfare agents
4	Theoretical	Personal cleaning from chemical warfare
5	Theoretical	Definition and properties of biological warfare agents
6	Theoretical	Protection and protection from biological warfare
7	Theoretical	Radiological elements
8	Intermediate Exam	Midterm
9	Theoretical	The main principles of radiation protection and measures to be taken
10	Theoretical	RESPONSIBILITY FOR USING CHEMICALS
11	Theoretical	Differences between nuclear weapons and classical weapons
12	Theoretical	The effects of nuclear weapons
13	Theoretical	Warning alarm signs, bunkers,
14	Theoretical	Warning alarm signs, bunkers,
15	Final Exam	Final Exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Midterm Examination	1	8	1	9
Final Examination	1	12	1	13
Total Workload (Hours)				50
[Total Workload (Hours) / 25*] = ECTS				2
*25 hour workload is accepted as 1 ECTS				



Learning Outcomes

1	Learn the differences between civil defense and civil protection and guide their applications accordingly.
2	Takes necessary precautions against CBRN attacks
3	Defines alarm signs, applies shelter, concealment and blackout principles when necessary.
4	Identify chemical threats and take necessary measures
5	Knows the effects of biological agents and precautions to be taken

Programme Outcomes (Emergency and Disaster Management)

1	Improving the ability to cope with life-threatening emergencies
2	The awareness of the necessity of lifelong learning and the ability to do so
3	To be able to use basic science (Mathematics, Chemistry, Physiology, Anatomy etc.) in the field of Emergency Aid and Disaster Management
4	Ability to analyze and interpret hazards and risks
5	Sensitivity to global and local disasters
6	Effective communication skills and foreign language knowledge
7	Skills and creativity in interdisciplinary teams
8	Providing physical and mental stability
9	To be able to organize, search and rescue search and rescue operations
10	To reach sufficient education level to understand the effects of disasters in universal and social dimensions
11	To recognize the cooperation between actors and their actors in Emergency Aid and Disaster Management
12	Emergency Aid and Disaster Management vocational, ethical and social responsibility awareness
13	Ability to assume an educational role in Emergency Aid and Disaster Management
14	To be able to use technology effectively in the field of Emergency Aid and Disaster Management
15	Emergency Aid, Search-Rescue and Disaster Management as a whole and manage emergency situations and responsibility awareness

Contribution of Learning Outcomes to Programme Outcomes 1:Very Low, 2:Low, 3:Medium, 4:High, 5:Very High

	L1	L2	L3	L4	L5
P1	4	3	3	3	3
P2	1	1	1	2	2
P3	3	3	3	3	2
P4	1	1	1	1	2
P5	1	1	1	2	2
P6	3	3	2	2	2
P7	1	1	1	1	2
P8	1	1	1	1	1
P9	1	1	1	5	5
P10	1	1	1	5	5
P11	1	1	1	4	4
P12	3	3	2	2	2
P13	3	3	2	2	2
P14	3	3	2	2	2
P15	3	3	2	2	2

