ESOGU ELECTRICAL-ELECTRONICS ENGINEERING DEPARTMENT
COURSE INFORMATION FORM

Course Title	Course Code
Fundamentals of Occupational Health and Safety	151224561

Semester in Program	Number of Course Hours per Week		ECTS Credit
	Theory	Practice	
4	2	0	2

Course ECTS Credit Distribution				
Basic Sciences	Engineering Sciences	Design	General Education	Social
	2			

Language of Instruction	Course Level	Course Type
English	Undergraduate	Required

Prerequisite	None
Objectives of the Course	To teach methods of protection from occupational accidents and occupational diseases in workplaces
Brief Course Content	Definition and importance of occupational safety, Occupational safety culture, Occupational accidents, Occupational diseases, Factors affecting the work environment, Basic occupational safety in workplaces, Risk Assessment, Personal Protectors, Fire, Related legislation.

	Learning Outcomes of the Course	Contributed POs	Teaching Methods *	Assessment Methods **
1	Understanding the basic concepts, principles and terminology of occupational health and safety.	6 ,7, 8, 9	1,8	A, G
2	To know and apply national and international legal regulations and standards related to occupational health and safety	6 ,7, 8, 9	1, 8	A, G
3	Ability to identify hazards in the workplace, make risk assessments and determine the necessary measures to minimize risks.	6 ,7, 8, 9	1, 8	A, G
4	Competence to identify possible emergencies in the workplace, to prepare emergency plans and to implement these plans.	6 ,7, 8, 9	1, 8	A, G
5	Understanding the causes, effects and prevention methods of occupational accidents and occupational diseases	6 ,7, 8, 9	1, 8	A, G
6	Identifying ergonomic risk factors in the workplace and making ergonomic arrangements.	6 ,7, 8, 9	1, 8	A, G
7	To have knowledge about the correct use and maintenance of personal protective equipment.	6 ,7, 8, 9	1, 8	A, G
8	Understand the importance of health and safety culture in the workplace and the strategies necessary for the development of this culture.	6 ,7, 8, 9	1, 8	A, G
9	Competence to observe and supervise health and safety practices in the workplace	6 ,7, 8, 9	1, 8	A, G

***Teaching Methods** **1:**Lecture, **2:**Discussion, **3:**Experiment, **4:**Simulation, **5:**Question-Answer, **6:**Tutorial, **7**:Observation, **8**:Case Study, **9:**Technical Visit, **10:**Problem Solving, **11:**Induvidual Work, **12**:Team/Group Work, **13**:Brain Storm, **14:**Project Design / Management, **15:**Report Preparation and/or Presentation

****Assessment Methods** **A:**Exam, **B:**Quiz, **C:**Oral Exam, **D:**Homework, **E:**Report, **F:**Article Examination, **G:**Presentation, **I:**Experimental Skill, **J:**Project Observation, **K**:Class Attendance; **L**:Jury Exam

Main Textbook	Benjamin O. Alli "Fundamental principles of Occupational Health and Safety",ILO, 2008
Supplementary Resources	1. Kahya, E., 2014, İş Güvenliği, ESOGÜ Yayın No :246, Eskişehir. 2. Yiğit, A., İş Güvenliği, 2013, Dora basım-Yayın Dağıtım Ltd. Şti, Bursa

Necessary Course Material	NONE

Course Weekly Schedule	
1	Course scope, execution, evaluation. General information on Occupational Safety
2	Occupational Safety culture
3	Work Accidents (Factors, types, performance criteria)
4	Occupational Accidents (Theories of occurrence, statistics, investigations)
5	Occupational diseases
6	Risk factors
7	Ergonomic risk factors
8	Mid-Term Exams
9	Basic safety precautions in workplaces
10	Basic safety precautions in workplaces
11	Risk assessment
12	Personal protective equipment
13	Fire
14	OHS legislation
15	Project Presentation
16,17	Final Exams

Calculation of Course Workload			
Activities	**Count**	**Time (Hour)**	**Total Workload (Hour)**
Weekly classroom time	14	2	28
Weekly study time (review, reinforcing, preparation)			
Homework			
Taking a quiz			
Studying for a quiz			
Oral exam			
Studying for an oral exam			
Report writing (Preparation and presentation time included)			
Project (Preparation and presentation time included)	1	6	6
Presentation (Preparation time included)	1	4	4
Mid-Term Exam	1	2	2
Studying for Mid-Term Exam	1	9	6
Final Exam	1	2	2
Studying for Final Exam	1	9	6
		Total workload	**60**
		Total workload / 30	**2**
		Course ECTS Credit	**2**

Assessment	
Activity Type	**%**
Mid-term	30
Quiz	20
Final Exam	100
Total	100

COURSE CONTRIBUTION TO THE PROGRAM OUTCOMES (5: Very high, 4: High, 3: Middle, 2: Low, 1: Very low)		
NO	**PROGRAM OUTCOMES**	**Contribution**
1	a. Sufficient knowledge of mathematics	
	b. Sufficient knowledge of basic sciences	
	c. Sufficient basic engineering and Electrical-Electronics engineering knowledge	
	d. Skill of applying all these knowledge and experience to complicated Electrical-Electronics engineering problems	
2	Skill of defining, identifying, formulating and solving the complicated problems in Electrical-Electronics engineering and related areas by applying appropriate analysis and modelling methods.	
3	Skill of designing a complicated process, system, equipment or product by applying modern design methods under realistic constraints and conditions.	
4	To analyze and solve the complicated engineering problems: a. skill of developing, selecting and applying the required techniques and devices	
	b. skill of using information technologies effectively	
5	To study the complicated on the complicated Electrical-Electronics engineering problems and research subjects: a. skill of experimental design	
	b. skill of performing the experiments, collecting the data and analyzing and interpreting the results	
6	a. Skill of performing individual studies	5
	b. Skill of performing intra and interdisciplinary and multidisciplinary teamwork and studies	5
7	a. Skill of effective oral and written communication in Turkish and English	5
	b. Skill of improving and using foreign language knowledge	5
	c. Skill of effective reporting, understanding the reports and preparing the design and production reports	5
	d. Skill of effective presentation and giving and getting clear and understandable instructions.	5
8	Awareness of the necessity of life-long learning and skill of accessing to information and following the improvements in contemporary science and technology	5
9	a. Awareness of necessity of behaving in accordance with the ethical principles and awareness of the importance of having professional ethical responsibilities	5
	b. Knowledge about legal regulations and standards of engineering	5
10	a. Knowledge about project management, risk management and change management	
	b. Awareness of the significance of entrepreneurship and innovation	
	c. Knowledge about sustainable development	
11	Knowledge about the effects of engineering applications and practices on the global and social health, ecology and safety, knowledge about the current problems in relation to the working areas of Electrical-Electronics engineering; and awareness of the legal issues resulting from engineering solutions	
12	Knowledge about modern problems in local and universal scale	

INSTRUCTORS				
Prepared by				

Date:06.07.2024