**ÇANKAYA UNIVERSITY**
**FACULTY OF ARCHITECTURE**
**2022 – 2023 Spring Semester**

**ARCH 442 - OCCUPATIONAL HEALTH AND SAFETY II**

**Assoc. Prof. Dr. Aslı ER AKAN**
**Res. Assist: Yeliz Aksu, Damla Yeşilbağ, Burcu Eryılmaz**

## Basic Course Information

Dear Students,
Starting from 2020 – 2021 Fall semester a new course; ARCH 442 "Occupational Health and Safety –II" will be conducted in our University. This document briefly gives the background of the course followed by weekly programs.
Higher Education Law (Law No: 2547, Article 5/ı) was amended on April 23, 2015 and Occupational Health and Safety courses are listed as COMPULSORY courses for the faculties - departments whose graduates are eligible to become an OCCUPATIONAL SAFETY SPECIALIST.

(Law No: 2547, Article 5/ı) ***(Amended: Article 3747/1-29/5/1991)*** *In higher education institutions, Ataturk's Principles and History of Turkish Revolution, Turkish language, foreign language and occupational health and safety are must courses at the faculties that train and educate students who will have the capacity to become occupational health and safety specialists when they graduate in accordance with Occupational Health and Safety Law No. 6331 and dated 20/6/2012. In addition, one of the courses in physical education or fine arts are provided, which are not among must courses. All these courses are scheduled and applied for at least two semesters.*

Occupational Health and Safety Law (Law No: 6331) defines the OCCUPATIONAL SAFETY SPECIALIST as:
**Occupational safety specialist**: any engineer, architect or technician who are authorized by the Ministry to work in the field of occupational health and safety and who have occupational health and safety expertise certificate.

This definition of OCCUPATIONAL SAFETY SPECIALIST includes all departments of Faculty of Engineering and Faculty of Architecture. In addition, Physics, Chemistry and Biological Sciences departments of Faculty of Arts and Sciences are included.

The course will be given as an ONLINE course, with 14 different topics for the 14 weeks of the semester.

## Course Description

Within the scope of this course the responsibilities of government, employer and workers in health and safety. The effects of workplace on employees. The health and safety problems and their solution techniques in office and construction site, analysis and discussion of construction accidents, risk assessment methods, disaster and emergency management are included.

## Course Objectives

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It is aimed to teach professional liability about occupational health and safety, to raise awareness about risks and hazards in construction sector, to teach how to analyze and evaluate the risks in workplace, to teach disaster and emergency management.

## Learning Outcomes

Upon successful completion of this course, the student will be able to;

- be equipped with occupational health and safety culture.
- be aware of the risks and hazards in office and construction site.
- realize the hazards encountered in the construction sector, eliminate the hazards or the ability to take measures to keep under control.
- identify, analyze and evaluate the risks in workplace.
- be aware of the occupational health and safety legislation and legal responsibilities.

| Course Outline | |
|---|---|
| Week/Date | Topic(s) |
| **1**/27.02.23 | Introduction |
| **2**/06.03.23 | Earthquake Resilient Design |
| **3**/13.03.23 | Post Disaster Recovery Planning |
| **4**/20.03.23 | Earthquake Disaster Policies |
| **5**/27.03.23 | Disaster Assesment and Risk Management |
| **6**/03.04.23 | Occupational Health and Safety Risk Assessment Regulation<br>L Type 5x5 Matrix Method (L-Tipi Matris Metodu)<br>Fine Kinney Risk Assesment Method |
| **7**/10.04.23 | ISO 31000 Risk Management<br>ISO 45001 Occupational Health & Safety Management System |
| **8**/17.04.23 | Regulation on Health and Safety Precautions in Working with Display Screen Equipment<br>(Ekranlı Araçlarla Çalışmalarda Sağlık ve Güvenlik Önlemleri Hakkında Yönetmelik)<br>Manual Handling Regulations (Elle Taşıma İşleri Yönetmeliği) |
| **9**/24.04.23 | Regulation on Health and Safety Measures to be Taken in Workplace Buildings and Attachments<br>(İşyeri Bina ve Eklentilerinde Alınacak Sağlık ve Güvenlik Önlemlerine İlişkin Yönetmelik) |
| **10**/01.05.23 | Workers' Day |
| **11**/08.05.23 | Midterm |
| **12**/15.05.23 | Preliminary Hazard Analysis – PHA ( Ön Tehlike Analizi Metodu)<br>What if…? Analysis ( Olursa Ne Olur Analizi) |
| **13**/22.05.23 | Swot Analysis<br>Hazard and Operability Analysis- HAZOP (Tehlike ve İşletilebilme Çalışması Analizi ) |
| **14**/29.05.23 | Fault Tree Analysis Method- FTA (Hata Ağacı Analizi Yöntemi)<br>Event Tree Analysis Method -ETA (Olay Ağacı Analizi Yöntemi) |

| Grading Policy | | |
|---|---|---|
| Assessment Tool | Quantity | Percentage |
| Presentations | 10 | 20% |
| Midterm | 1 | 30% |
| Final Exam | 1 | 50% |

| Reference Books | | | |
|---|---|---|---|
| Author(s) | Title | Publisher | Publication Year |
| Hughes P., Ferret E., | Introduction to Health and Safety in Construction | Elsevier | 2005 |
| Holt J., | Principles of Construction Safety | Blackwell Science | 2005 |
| White, J. | Health and Safety Management An Alternative Approach to Reducing Accidents, Injury and Illness at Work | CRC Press | 2018 |
| Coble R.J., Haupt T.C, Hinze J. | The Management of Construction Safety and Health | CRC Press | 2000 |