

DEPARTMENT OF CIVIL ENGINEERING
COURSE SYLLABUS

| Course Details | | | | | |
|---------------------------------------|---|----------|-----------------|----------------------|---------------------|
| Code | | | | Academic Year | Semester |
| ISG001 | | | | 4 | Fall |
| Title | T | A | L | ECTS | |
| Occupational Health and Safety I | 2 | 0 | 0 | 2 | |
| Language | German | | | | |
| Level | Undergraduate | ✓ | Graduate | | Postgraduate |
| Department / Program | Civil Engineering | | | | |
| Forms of Teaching and Learning | Formal | | | | |
| Course Type | Compulsory | ✓ | Elective | | |
| Objectives | Basic theoretical knowledge in the field of occupational health and safety, along with the fundamental obligations outlined in the legislation, is taught. In particular, the duties, authorities, and responsibilities of the Naval Architect in the position of employer representative are comprehensively covered. The causes, consequences, and prevention of occupational accidents and diseases occurring in the shipbuilding industry are addressed in detail. | | | | |
| Content | The conceptual framework of occupational health and safety (OHS), national and international standards, fundamental information on the causes, consequences, and prevention of occupational accidents and diseases are provided. Key regulations in our legislation on OHS, case studies, and Supreme Court decisions are analyzed. Additionally, occupational accidents in the shipbuilding industry are examined in detail, and necessary preventive measures are assessed. | | | | |
| Prerequisites | None | | | | |
| Coordinator | Dipl.-Ing. Joachim Kuntze | | | | |
| Lecturer(s) | Dipl.-Ing. Joachim Kuntze | | | | |
| Assistant(s) | None | | | | |
| Work Placement | No | | | | |
| Recommended or Required Reading | | | | | |
| Books / Lecture Notes | Yılmaz, F., Occupational Health and Safety Textbook" Yelekçi, M., "Worker Health and Safety" Esin, A., "Occupational Health and Safety" Çelebi, U.B., "Occupational Health and Safety in Shipyard Textbook" | | | | |
| Other Sources | Yılmaz, F., Occupational Health and Safety Textbook" Yelekçi, M., "Worker Health and Safety" Esin, A., "Occupational Health and Safety" Çelebi, U.B., "Occupational Health and Safety in Shipyard Textbook" | | | | |
| Additional Course Material | | | | | |
| Documents | | | | | |
| Assignments | | | | | |

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|------------------------------------|-------|--|-------------------|
| Exams | | | |
| Course Composition | | | |
| Mathematics und Basic Sciences | | | % |
| Engineering | | | % |
| Engineering Design | | | % |
| Social Sciences | | | % |
| Educational Sciences | | | % |
| Natural Sciences | | | % |
| Health Sciences | | | % |
| Expert Knowledge | 100 | | % |
| Assessment | | | |
| Activity | Count | | Percentage (%) |
| Midterm Exam | 1 | | 40 |
| Quiz | | | |
| Assignments | | | |
| Attendance | | | |
| Recitations | | | |
| Projects | | | |
| Final Exam | 1 | | 60 |
| | | Total | 100 |
| ECTS Points and Work Load | | | |
| Activity | Count | Duration | Work Load (Hours) |
| Lectures | 14 | 2 | 28 |
| Self-Study | 12 | 2 | 24 |
| Assignments | | | |
| Presentation / Seminar Preparation | | | |
| Midterm Exam | 1 | 2 | 2 |
| Recitations | | | |
| Laboratory | | | |
| Projects | | | |
| Final Exam | 1 | 2 | 2 |
| | | Total Work Load | 56 |
| | | ECTS Points(Total Work Load / Hour) | 2 |
| Learning Outcomes | | | |

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| 1 | Students will be able to define the basic concepts of occupational health and safety, interpret national and international regulations, and analyze the causes of occupational accidents and diseases, developing preventive measures accordingly. |
| 2 | Students will be able to analyze the causes of occupational accidents and diseases, and identify the necessary preventive measures to avoid such incidents. |
| 3 | Students will understand risk assessment, preventive measures, and safety culture, and will adopt this culture, gaining the ability to apply it in the field of occupational health and safety. |
| 4 | Students will be able to analyze the causes of occupational accidents in the shipbuilding industry and identify the necessary measures to prevent such accidents. |
| 5 | Students will understand the engineer's responsibilities in terms of occupational safety and will acquire the knowledge and skills to effectively implement these responsibilities. |

Weekly Content

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|----|--|
| 1 | Theoretical framework, definitions and scope of occupational health and safety. Cost of occupational accidents and illnesses |
| 2 | Economical dimensions of occupational accidents and illnesses, importance of OHS for he enterprises |
| 3 | Analysis of the risky fields-sectors of Turkey in OHS |
| 4 | Causes of occupational accidents and illnesses: physical, ergonomic, chemical, biological, individual and psycho-social risks |
| 5 | Components of preventive OHS approach: Risk Assessment and Management, Ergonomic Precautions, Organizing the OHS Activities |
| 6 | Components of preventive OHS approach: OHSAS 18001 Management System, Training, Regular Sanitary Control ve Occupational Physician, OHS on employing process |
| 7 | National and international standartds and conventions in OHS. The legal arrangements concerned with OHS in Turkey: OHS in Acts |
| 8 | Midterm Exam |
| 9 | The definitions, scope and juridical results of employer, employee, employer agent, workplace, subcontractor, occupational accident, occupational illness. |
| 10 | The regulations and guidelines on OHS: Occupational Health and Safety Regulation. |
| 11 | The Regulation on Heavy and Hazardous Work, The Regulation About OHS Training, The Regulation on Workplace Health and Safety Units and Common Health and Safety Units. |
| 12 | Responsibilities of employer and employer agent (engineer-OHS expert) about occupational accidents and illnesses; case studies. |
| 13 | Analysis of the statistics on occupational accidents and illnesses, the most frequent accidents and illnesses and precautions. |
| 14 | Case studies and court decisions of Court of Appeals. |
| 15 | Case studies and court decisions of Court of Appeals. |
| 16 | Final Exam |

Contribution of Learning Outcomes to Program Objectives(1-5)

| | P1 | P2 | P3 | P4 | P5 | P6 | P7 |
|---|----|----|----|----|----|----|----|
| 1 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| 2 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| 3 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |

Contribution Level

1: Low 2: Low-intermediate 3: Intermediate 4: High 5: Very High

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<https://obs.tau.edu.tr/oibs/bologna/progLearnOutcomes.aspx?lang=en&curSunit=5728>

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