

DEPARTMENT OF ENERGY SCIENCE AND TECHNOLOGY
COURSE SYLLABUS

| Course Details | | | | |
|---------------------------------------|--|----------|-----------------|---------------------|
| Code | Academic Year | | | Semester |
| ISG001 | 4 | | | 7 |
| Title | T | A | L | ECTS |
| Occupational Safety and Health I | 2 | 0 | 0 | 2 |
| Language | German | | | |
| Level | Undergraduate | X | Graduate | Postgraduate |
| Department / Program | Department of Energy Science and Technology (German) | | | |
| Forms of Teaching and Learning | Face to Face | | | |
| Course Type | Compulsory | X | Elective | |
| Objectives | Teaching of basic theoretical information occupational health and safety field, basic legal arrangements on OHS law in Turkey; especially duties, competencies and responsibilities of the naval architects. To inform causes and effects of occupational accidents and illnesses and basic courses about preventive practices and basic legal arrangements in the shipyard industry. | | | |
| Content | Theoretical framework of occupational health and safety (OHS), national and international standards of the OHS; causes and effects of occupational accidents and illnesses and basic courses about preventive practices, basic legal arrangements on OHS law in Turkey, case studies and civil jurisdictions of Court of Appeals, analysis of the occupational accidents in shipyard industry. | | | |
| Prerequisites | | | | |
| Coordinator | | | | |
| Lecturer(s) | Mühendis Joachim Kuntze | | | |
| Assistant(s) | | | | |
| 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 | | | | |
| Exams | | | | |
| Course Composition | | | | |
| Mathematics und Basic | | | | % |

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| | | | |
|------------------------------------|---|--|--------------------------|
| Sciences | | | |
| Engineering | | | % |
| Engineering Design | | | % |
| Social Sciences | | | % |
| Educational Sciences | | | % |
| Natural Sciences | | | % |
| Health Sciences | | | % |
| Expert Knowledge | | | % |
| Assessment | | | |
| Activity | Count | | Percentage (%) |
| Midterm Exam | 1 | | 40 |
| Quiz | 0 | | 0 |
| Assignments | 0 | | 0 |
| Attendance | 0 | | 0 |
| Recitations | 0 | | 0 |
| Projects | 0 | | 0 |
| Final Exam | 1 | | 1 |
| | | Total | 100 |
| ECTS Points and Work Load | | | |
| Activity | Count | Duration | Work Load (Hours) |
| Lectures | 14 | 2 | 28 |
| Self-Study | 14 | 2 | 28 |
| Assignments | | | |
| Presentation / Seminar Preparation | | | |
| Midterm Exam | 1 | 3 | 3 |
| Recitations | | | |
| Laboratory | | | |
| Projects | | | |
| Final Exam | 1 | 3 | 3 |
| | | Total Work Load | 62 |
| | | ECTS Points (Total Work Load / Hours) | 2 |
| Learning Outcomes | | | |
| 1 | Students shall learn the basic concepts related to occupational safety and health of workers | | |
| 2 | To learn the causes and measures to be taken to prevent accidents at work and occupational diseases | | |
| 3 | Students shall adopt risk, prevention, and safety culture | | |

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| 4 | To learn the causes of work-related accidents and the measures to be taken in Ship Building Industry |
| 5 | Students shall understand Engineer's responsibility the terms of occupational safety |

Weekly Content

| | |
|----|--|
| 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. |

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 | | | | | | | |
| 3 | | | | | | | |
| 4 | | | | | | | |
| 5 | | | | | | | |
| 6 | | | | | | | |
| 7 | | | | | | | |
| 8 | | | | | | | |
| 9 | | | | | | | |
| 10 | | | | | | | |
| 11 | | | | | | | |
| 12 | | | | | | | |

Contribution Level

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



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| Compiled by: | |
| Date of Compilation: | |