**ESOGU AERONAUTICAL ENGINEERING DEPARTMENT**

**COURSE INFORMATION FORM**

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| **Course Name** | **Course Code** |
| OCCUPATIONAL HEALTH AND SAFETY 1 |  |

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| **Semester** | **Number of Course Hours per Week** | **ECTS** |
| **Theory** | **Practice** |
| 1 | 2 | 0 | 2 |

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| **Course Category (Credit)** |
| **Basic Sciences** | **Engineering Sciences** | **Design** | **General Education** | **Social** |
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| **Course Language** | **Course Level** | **Course Type** |
| English | Undergraduate | Compulsory |

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| **Prerequisite(s) if any** |  |
| **Objectives of the Course** | To educate students on basic Occupational Health and Safety; to form safety culture; to give information about the aim and scope of 6331 numbered Occupational Health and Safety law; to give basic information about tasks, authority and responsibilities to provide Occupational Health and Safety in works; to educate employer and workers basically about right and obligation in work; student To provide following legal regulation and evaluating Occupational Health and Safety subject to students |
| **Short Course Content** | Concept of Occupational Health and Safety and its development; Developments related to Occupational Health and Safety in the World and in Turkey; A general view of Occupational Health and Safety and culture of safety, the tasks belong to institutions, organizations and workers in forming the safety culture; National and international institutions, agreements related to Occupational Health and Safety; Occupational Health and Safety management systems; Danger and risk terms in Occupational Health and Safety; Risk management, evaluation and methodology, risk analysis and case studies; Occupational Health and Safety risk reasons (physical, chemical, biological…); Occupational accident, reasons, preventing and protecting principles; Occupational diseases, reasons, preventing and protecting principles; Ergonomy; First aid |

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| **Learning Outcomes of the Course** | **Contributed PO(s)**  | **Teaching Methods \*** | **Measuring Methods \*\*** |
| **1** | To learn Occupational Safety regulations and basic terms of Occupational  | 1, 2, 3, 4, 5, 6, 8 | 1, 5, 9, 10, 11 | A, D, E, G, J, K |
| **2** | Occupational accident definition, reasons and ability to use international accident evaluation methodologies  | 1, 2, 3, 4, 5, 6, 8 | 1, 5, 9, 10, 11 | A, D, E, G, J, K |
| **3** | To learn national institutions related to Occupational Safety, Occupational Safety specialist authority and responsibilities  | 1, 2, 3, 4, 5, 6, 8 | 1, 5, 9, 10, 11 | A, D, E, G, J, K |
| **4** | To learn design and standarts of work equipments oriented to Occupational Safety, education of health safety in works, documentation, OHSAS 18001 (TS 18001) Occupational Health and Safety quality standarts  | 1, 2, 3, 4, 5, 6, 8 | 1, 5, 9, 10, 11 | A, D, E, G, J, K |
| **5** | To learn regulations related to occupation | 1, 2, 3, 4, 5, 6, 8 | 1, 5, 9, 10, 11 | A, D, E, G, J, K |
| **6** |  |  |  |  |

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| **Main Textbook** | Uçuşa Başlangıç (Introduction To Flight), John D. Anderson, Jr., (Çev: Adil Yükselen), Nobel Akademik Yayıncılık, Nobel Akademik Yayıncılık |
| **Supporting References** | Yechout, T. R., & Morris, S. L. (2003). Introduction to aircraft flight mechanics: Performance, static stability, dynamic stability, and classical feedback control. Reston, VA: American Institute of Aeronautics and Astronautics. |
| **Necessary Course Material** |  |

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| **Course Schedule** |
| **1** |  Concept of Occupational Health and Safety and its development |
| **2** |  Developments related to Occupational Health and Safety in the World and in Turkey |
| **3** |  A general view of Occupational Health and Safety and culture of safety, the tasks belong to institutions,  organizations and workers in forming the safety culture  |
| **4** |  National and international institutions, agreements related to Occupational Health and Safety  |
| **5** |  Occupational Health and Safety management systems |
| **6** |  Danger and risk terms in Occupational Health and Safety  |
| **7** |  Risk management, evaluation and methodology, risk analysis and case studies |
| **8** | Mid-Term Exam |
| **9** |  Occupational Health and Safety risk reasons (physical, chemical, biological…) |
| **10** |  Occupational accident, reasons, preventing and protecting principles |
| **11** |  Occupational diseases, reasons, preventing and protecting principles |
| **12** |  Ergonomy |
| **13** |  First aid |
| **14** |  First aid |
| **15,16** | Final Exam |

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| **Calculation of Course Workload** |
| **Activities** | **Number** | **Time (Hour)** | **Total Workload (Hour)** |
| Course Time (number of course hours per week) | 14 | 2 | 28 |
| Classroom Studying Time (review, reinforcing, prestudy,….) |  |  |  |
| Homework | 4 | 3 | 12 |
| Quiz Exam | 3 | 1 | 3 |
| Studying for Quiz Exam | 3 | 2 | 6 |
| Oral exam  |  |  |  |
| Studying for Oral Exam  |  |  |  |
| Report (Preparation and presentation time included) |  |  |  |
| Project (Preparation and presentation time included) |  |  |  |
| Presentation (Preparation time included) |  |  |  |
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| Mid-Term Exam | 1 | 2 | 2 |
| Studying for Mid-Term Exam | 1 | 5 | 5 |
| Final Exam | 1 | 2 | 2 |
| Studying for Final Exam | 1 | 5 | 5 |
|  | **Total workload** | **63** |
|  | **Total workload / 30** | **2,1** |
|  | **Course ECTS Credit** | **2** |

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| **Evaluation** |
| **Activity Type** | **%** |
| Mid-term | 40 |
| Quiz | - |
| Homework | - |
| Report | - |
|   | 60 |
| **Final Exam** | 100 |
| **Total** | 40 |

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| **RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND THE PROGRAM OUTCOMES (PO)** (5: Very high, 4: High, 3: Middle, 2: Low, 1: Very low) |
| **NO** | **PROGRAM OUTCOME** | **Contribution** |
| **1** | Sufficient knowledge of engineering subjects related with mathematics, science and own branch; an ability to apply theoretical and practical knowledge on solving and modeling of engineering problems. | 5 |
| **2** | Ability to determine, define, formulate and solve complex engineering problems; for that purpose an ability to select and use convenient analytical and experimental methods. | 5 |
| **3** | Ability to design a complex system, a component and/or an engineering process under real life constrains or conditions, defined by environmental, economical and political problems; for that purpose an ability to apply modern design methods. | 5 |
| **4** | Ability to develop, select and use modern methods and tools required for engineering applications; ability to effective use of information technologies. | 5 |
| **5** | In order to investigate engineering problems; ability to set up and conduct experiments and ability to analyze and interpretation of experimental results. | 3 |
| **6** | Ability to work effectively in inner or multi-disciplinary teams; proficiency of interdependence. | 5 |
| **7** | Ability to communicate in written and oral forms in Turkish/English; proficiency at least one foreign language. | 5 |
| **8** | Awareness of life-long learning; ability to reach information; follow developments in science and technology and continuous self-improvement. | 3 |
| **9** | Understanding of professional and ethical issues and taking responsibility  | 3 |
| **10** | Awareness of project, risk and change management; awareness of entrepreneurship, innovativeness and sustainable development. | 2 |
| **11** | Knowledge of actual problems and effects of engineering applications on health, environment and security in global and social scale; an awareness of juridical results of engineering solutions. | 2 |
| **12** |  |  |

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| **DERSİN YÜRÜTÜCÜLERİ** |
| **Yürütücü**  | Prof. Dr. Melih Cemal KUŞHAN | Doç. Dr. Işıl YAZAR | Doç.Dr. Selim Gürgen | Dr. Öğr. Üyesi Fehmi Diltemiz | Dr. Öğr. Üyesi Zafer ÖZNALBANT |
| **İmza** |  |  |  |  |  |

**Date:** 10.07.2024