# TOROS ÜNİVERSİTESİ

Faculty Of Engıneerıng
Industrıal Engıneerıng (Englısh)

## Course Information

| ERGONOMICS | | | | | |
|---|---|---|---|---|---|
| **Code** | **Semester** | **Theoretical** | **Practice** | **National Credit** | **ECTS Credit** |
| | | **Hour / Week** | | | |
| INE203 | Fall | 2 | 2 | 3 | 5 |

| | |
|---|---|
| **Prerequisites and co-requisites** | NONE |
| **Language of instruction** | English |
| **Type** | Required |
| **Level of Course** | Bachelor's |
| **Lecturer** | Yrd. Doç. Dr. Fikri EGE |
| **Mode of Delivery** | Face to Face |
| **Suggested Subject** | NONE |
| **Professional practise ( internship )** | None |
| **Objectives of the Course** | Teaching fundamental issues of ergonomics |
| **Contents of the Course** | Identify sources of adverse effects on health and environment, control OHSE risks to health or environment in organisations, understand concepts of physical ergonomics, concepts of cognitive ergonomics and human factors. Interpret ergonomics data. Prepare technical reports. Anticipate potential hazards to people, property and the environment. Apply concepts and theories from cognitive psychology to the study of work. |

## Learning Outcomes of Course

| # | Learning Outcomes |
|---|---|
| 1 | Student can develop the idea of ergonomics for interface design. |
| 2 | Student can evaluate the human factors for the design of 3 dimensional interactive mechanisms |
| 3 | Student can create applications and projects based on analogue interactions |
| 4 | Studentan evaluate relevant resources |

## Course Syllabus

| # | Subjects | Teaching Methods and Technics |
|---|---|---|
| 1 | Introduction to Human Factors and Ergonomics | Lecturing |
| 2 | Definition of human in terms of ergonomics | Lecturing |
| 3 | Human and performance | Lecturing |
| 4 | Physical work - Static work – Dynamic work | Lecturing |
| 5 | Human and energy requirement | Lecturing |
| 6 | Position of the body - energy relationship | Lecturing |
| 7 | Midterm | Exam |
| 8 | Mental Activities | Lecturing |
| 9 | Breaks | Lecturing |
| 10 | Air Conditioning | Lecturing |
| 11 | Noise | Lecturing |

| | | |
|---|---|---|
| 12 | Mechanical vibrations | Lecturing |
| 13 | Hazardous substances and other environmental affects in the working environment | Lecturing |
| 14 | Lifting - Handling - Application of force and moment | Lecturing |
| 15 | Review | Lecturing |
| 16 | Final Exam | |

## Course Syllabus

| # | Material / Resources | Information About Resources | Reference / Recommended Resources |
|---|---|---|---|
| 1 | Human Factors in Engineering and Design, Mark S. Sanders, Ernest J. McCormick, McGraw Hill 7th Edition | | |

## Method of Assessment

| # | Weight | Work Type | Work Title |
|---|---|---|---|
| 1 | 40% | Mid-Term Exam | Mid-Term Exam |
| 2 | 60% | Final Exam | Final Exam |

## Relationship between Learning Outcomes of Course and Program Outcomes

| # | Learning Outcomes | Program Outcomes | Method of Assessment |
|---|---|---|---|
| 1 | Student can develop the idea of ergonomics for interface design. | 4 | 1,2 |
| 2 | Student can evaluate the human factors for the design of 3 dimensional interactive mechanisms | 2 | 1,2 |
| 3 | Student can create applications and projects based on analogue interactions | 1 | 1,2 |
| 4 | Studentan evaluate relevant resources | 9 | 1,2 |

*PS. The numbers, which are shown in the column Method of Assessment, presents the methods shown in the previous table, titled as Method of Assessment.*

## Work Load Details

| # | Type of Work | Quantity | Time (Hour) | Work Load |
|---|---|---|---|---|
| 1 | Course Duration | 14 | 4 | 56 |
| 2 | Course Duration Except Class (Preliminary Study, Enhancement) | 14 | 1 | 14 |
| 3 | Presentation and Seminar Preparation | 0 | 0 | 0 |
| 4 | Web Research, Library and Archival Work | 0 | 0 | 0 |
| 5 | Document/Information Listing | 0 | 0 | 0 |
| 6 | Workshop | 14 | 3 | 42 |
| 7 | Preparation for Midterm Exam | 1 | 1 | 1 |
| 8 | Midterm Exam | 1 | 2 | 2 |
| 9 | Quiz | 0 | 0 | 0 |
| 10 | Homework | 0 | 0 | 0 |
| 11 | Midterm Project | 0 | 0 | 0 |
| 12 | Midterm Exercise | 0 | 0 | 0 |
| 13 | Final Project | 1 | 10 | 10 |
| 14 | Final Exercise | 0 | 0 | 0 |
| 15 | Preparation for Final Exam | 1 | 1 | 1 |
| 16 | Final Exam | 1 | 2 | 2 |

| | |
|---|---|
| | **128** |