

| <b>Course Description</b>  |   |                                |                         |                           |             |
|--|---|--------------------------------|-------------------------|---------------------------|-------------|
| <b>Name</b>  | <b>Code</b>   | <b>Semester</b>                | <b>T+A Hour</b>         | <b>Credit</b>             | <b>ECTS</b> |
| HUMAN FACTOR in DESIGN   | ICT2259420  | Spring Semester                | 2+0                     | 2                         | 2           |
| <b>Prerequisites Courses</b>   |   |                                |                         |                           |             |
| <b>Recommended Elective Courses</b>  |   |                                |                         |                           |             |
| <b>Language of Instruction</b>   | Turkish   |                                |                         |                           |             |
| <b>Course Level</b>  | First Cycle (Bachelor's Degree)   |                                |                         |                           |             |
| <b>Course Type</b>   | Required  |                                |                         |                           |             |
| <b>Course Coordinator</b>  | Assist.Prof. Tolga KILIÇ  |                                |                         |                           |             |
| <b>Name of Lecturer(s)</b>   | Lect. İpek BANKEROĞLU, Assist.Prof. Tolga KILIÇ   |                                |                         |                           |             |
| <b>Assistant(s)</b>  | Res.Asst. Zübeyde Keskin  |                                |                         |                           |             |
| <b>Aim</b>   | Class aims to use equally accessible and usable environment, space, building elements, equipment and products for all disabled people in different ways, gender, age and ability for benefiting the same rights. In this context, space construction methods are introduced based on universal design principles.   |                                |                         |                           |             |
| <b>Course Content</b>  | This course contains; The definition of human factor in design, the subjects to be worked on, general information about the method and homework.,Human measurements, the concept of anthropometry and its applications in design.Discussing the concept of ergonomics in the context of people, space and environment.,Transferring official legislation regarding the human factor in design.,Explaining universal design principles and accessible design criteria.,To convey the ergonomic requirements of walking disabled and wheelchair users and the design criteria needed by these users.,Transmission of ergonomic requirements and design criteria of hearing impaired users.The place can be converted to a hearing impaired user.,Transferring the ergonomic requirements and design criteria of visually impaired users.Converting spaces to be suitable for a visually impaired user.,Transmission of ergonomic requirements and design criteria for 0-6 age groupers.Transmission of ergonomic requirements and design criteria of older users.,Explaining the psychological relationship between humans and architectural space in design.,Explanation of public space and design principles.,Examination of design examples for accommodation purposes.,Examination of developments and innovations regarding the human factor in design.,Explanation of accessibility in the built environment with mobile devices.,Explaining the use of smart buildings and computer interfaces in accessibility.. |                                |                         |                           |             |
| <b>Course Learning Outcomes</b>  |   |                                | <b>Teaching Methods</b> | <b>Assessment Methods</b> |             |
| 1) Knows human-oriented interior design criteria.  |   |                                | 14, 18, 9               | A, E, G                   |             |
| 2) Knows human anthropometry and ergonomic criteria.   |   |                                | 14                      | C, E, G                   |             |
| 3) Interprets and understands the legislation regarding the human factor in design.                    |   |                                | 14, 18, 9               | A, E, G                   |             |
| 4) Understands the ergonomic needs of walking-impaired wheelchair users and offers solutions for them. |   |                                | 14, 18, 9               | E, G                      |             |
| 5) Provides solution suggestions for the ergonomic needs of hearing and visually impaired users.       |   |                                | 14, 18, 9               | A, G                      |             |
| <b>Teaching Methods</b>  | 14: Self Study Method, 18: Micro Teaching Technique, 9: Lecture Method  |                                |                         |                           |             |
| <b>Assessment Methods</b>  | A: Traditional Written Exam, C: Multiple-Choice Exam, E: Homework, G: Quiz  |                                |                         |                           |             |
| <b>Lecture Schedule</b>  |   |                                |                         |                           |             |
| <b>Sequence</b>  | <b>Topics</b>   | <b>Preliminary Preparation</b> |                         |                           |             |
| 1  | The definition of human factor in design, the subjects to be worked on, general information about the method and homework.  |                                |                         |                           |             |
| 2  | Human measurements, the concept of anthropometry and its applications in design.Discussing the concept of ergonomics in the context of people, space and environment.   |                                |                         |                           |             |
| 3  | Transferring official legislation regarding the human factor in design.   |                                |                         |                           |             |
| 4  | Explaining universal design principles and accessible design criteria.  |                                |                         |                           |             |
| 5  | To convey the ergonomic requirements of walking disabled and wheelchair users and the design criteria needed by these users.  |                                |                         |                           |             |
| 6  | Transmission of ergonomic requirements and design criteria of hearing impaired users.The place can be converted to a hearing impaired user.   |                                |                         |                           |             |
| 7  | Transferring the ergonomic requirements and design criteria of visually impaired users.Converting spaces to be suitable for a visually impaired user.   |                                |                         |                           |             |
| 8  | Transmission of ergonomic requirements and design criteria for 0-6 age groupers.Transmission of ergonomic requirements and design criteria of older users.  |                                |                         |                           |             |
| 9  | Explaining the psychological relationship between humans and architectural space in design.   |                                |                         |                           |             |
| 10   | Explanation of public space and design principles.  |                                |                         |                           |             |
| 11   | Examination of design examples for accommodation purposes.  |                                |                         |                           |             |
| 12   | Examination of developments and innovations regarding the human factor in design.   |                                |                         |                           |             |
| 13   | Explanation of accessibility in the built environment with mobile devices.  |                                |                         |                           |             |
| 14   | Explaining the use of smart buildings and computer interfaces in accessibility.   |                                |                         |                           |             |
| <b>Evaluation Methods</b>  |   | <b>Weight(%)</b>               |                         |                           |             |
| Midterm Exam   |   | 50                             |                         |                           |             |
| General Exam   |   | 50                             |                         |                           |             |

**Resources**

To be distributed by the lecturer

- 1-) Human Factors Design Handbook, Wesley E. Woodson, Peggy Tillman, and Barry Tillman Introduction to Ergonomics, 2-) Third Edition, R.S. Bridger The Green Imperative, Victor Papanek, Story, M. F., Mueller, J.L., Mace, R.L. 1998. 3) "The Universal Design File: Designing for People of All Ages and Abilities". NC State University, The Center for Universal Design. 128 s.
- 4-) Sürmen, Ş. 1995. Özürlüler ve Yaşlılarla İlgili Mimari Ölçüler, Standartlar, Uygulamalar. İ.T.Ü. Çevre ve Şehircilik Uygulama Araştırma Merkezi, İstanbul. 61 s. 5-) Sürmen, Ş. 2004. Ben Sakatlandım... : Sakatlık, Özürlülük Üzerine Yazılar. Nüans Yayınevi, Ankara. 309 s. 6-)Tasarım ve Özgürlük: Engelli İnsanlar ve Herkes için Tasarım, 2007, 7-) WHO (Dünya Sağlık Örgütü). 2001. International Classification of Functioning