

T.R.  
BALIKESIR UNIVERSITY  
UNDERGRADUATE PROGRAM COURSE DEFINITION FORM  
(UNIVERSITY ELECTIVE COURSE)

|                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |             |             |                            |                                                   |                                            |              |                |             |
|--------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------|----------------------------|---------------------------------------------------|--------------------------------------------|--------------|----------------|-------------|
| <b>Course Title: Science and Research Ethics</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |             |             |                            | <b>Name of the Program: Undergraduate Program</b> |                                            |              |                |             |
| <b>Education and Teaching Workload</b>           | <b>Theory</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <b>App.</b> | <b>Lab.</b> | <b>Project/Field Study</b> | <b>Home work</b>                                  | <b>Others</b>                              | <b>Total</b> | <b>Credit</b>  | <b>ECTS</b> |
|                                                  | 28                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 0           | 0           | 28                         | 20                                                | 0                                          | 76           | 2              | 3           |
| <b>Course Language</b>                           | Turkish                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |             |             |                            |                                                   |                                            |              |                |             |
| <b>Type of Course</b>                            | University Elective Course                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |             |             |                            |                                                   |                                            |              |                |             |
| <b>Course Period</b>                             | <input checked="" type="checkbox"/> Autumn                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |             |             |                            |                                                   | <input checked="" type="checkbox"/> Spring |              |                |             |
| <b>Course Content</b>                            | It is to examine knowledge, science, scientific research, value, morality, ethics, science ethics, research ethics, publication ethics, ethical principles and rules, unethical behaviors, causes of unethical behaviors and ways to prevent them.                                                                                                                                                                                                                                                                 |             |             |                            |                                                   |                                            |              |                |             |
| <b>Aim of the Course</b>                         | To teach students knowledge, science, scientific research, ethics, science ethics, research ethics, publication ethics and unethical behavior.                                                                                                                                                                                                                                                                                                                                                                     |             |             |                            |                                                   |                                            |              |                |             |
| <b>Week</b>                                      | <b>Course Subjects</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |             |             |                            |                                                   |                                            |              |                |             |
| 1                                                | Knowledge, Science and Characteristics of Science                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |             |             |                            |                                                   |                                            |              |                |             |
| 2                                                | Scientific Research and Scientific Method                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |             |             |                            |                                                   |                                            |              |                |             |
| 3                                                | Value, Morality, Ethics, Ethical Theories and Ethics of the Teaching Profession                                                                                                                                                                                                                                                                                                                                                                                                                                    |             |             |                            |                                                   |                                            |              |                |             |
| 4                                                | Science Ethics, Research Ethics and Publication Ethics                                                                                                                                                                                                                                                                                                                                                                                                                                                             |             |             |                            |                                                   |                                            |              |                |             |
| 5                                                | Ethical Principles, Unethical Behaviors and Ethical Violations in the Research Process                                                                                                                                                                                                                                                                                                                                                                                                                             |             |             |                            |                                                   |                                            |              |                |             |
| 6                                                | Publication Ethics and Unethical Behaviors in the Publication Process                                                                                                                                                                                                                                                                                                                                                                                                                                              |             |             |                            |                                                   |                                            |              |                |             |
| 7                                                | Unethical Behavior: Plagiarism                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |             |             |                            |                                                   |                                            |              |                |             |
| 8                                                | Unethical Behaviors: Fabrication, Falsification, Duplication and Slicing                                                                                                                                                                                                                                                                                                                                                                                                                                           |             |             |                            |                                                   |                                            |              |                |             |
| 9                                                | Unfair Authorship and Other Types of Ethical Violations                                                                                                                                                                                                                                                                                                                                                                                                                                                            |             |             |                            |                                                   |                                            |              |                |             |
| 10                                               | Online Collection of Data, Storage of Data and Ethics                                                                                                                                                                                                                                                                                                                                                                                                                                                              |             |             |                            |                                                   |                                            |              |                |             |
| 11                                               | Ethical Rules: Consultancy and Jury Membership                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |             |             |                            |                                                   |                                            |              |                |             |
| 12                                               | Ethical Rules: Editorship and Refereeing                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |             |             |                            |                                                   |                                            |              |                |             |
| 13                                               | Legal Legislation and Boards Related to Research and Publication Ethics                                                                                                                                                                                                                                                                                                                                                                                                                                            |             |             |                            |                                                   |                                            |              |                |             |
| 14                                               | Unethical Behaviors in Science: Causes, Precautions, Solutions Suggestions and Plagiarism Screening Programs                                                                                                                                                                                                                                                                                                                                                                                                       |             |             |                            |                                                   |                                            |              |                |             |
| <b>Learning Output(s) and Efficiencies</b>       | At the end of this course:<br>1. Students explain the concepts of knowledge, science and scientific research.<br>2. Students establish relationships between the concepts of science, value, morality and ethics.<br>3. Students learn about science ethics, research ethics, publication ethics, ethical principles and ethical rules.<br>4. Students understand the importance of ethics in scientific studies.<br>5. Students know unethical behaviors, causes of unethical behaviors and ways to prevent them. |             |             |                            |                                                   |                                            |              |                |             |
| <b>Course Book and/or other Sources</b>          | Kürşad Yılmaz ve Recep Serkan Arık (2021). Bilim ve Araştırma Etiği. 3. Basım. Ankara: Pegem Akademi.<br>Ergül Demir (2019). Bilimsel Araştırma Paradigmaları. Ankara: Ankara Üniversitesi.<br>Ayşe Erzan (2008). Bilim Etiği Elkitabı. Ankara: Türkiye Bilimler Akademisi.<br>Mestan Küçük (2003). Bilimsel Araştırma ve Etik. Kurgu Dergisi, 20, 255-266.                                                                                                                                                        |             |             |                            |                                                   |                                            |              |                |             |
| <b>Evaluation Criterion</b>                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |             |             |                            |                                                   | Click as if applies                        |              | Percentage (%) |             |
|                                                  | <b>Midterm examination</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |             |             |                            |                                                   | X                                          |              | 40             |             |
|                                                  | <b>Final examination</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |             |             |                            |                                                   | X                                          |              | 60             |             |
| <b>Course Teacher</b>                            | Prof. Dr. Bülent PEKDAĞ                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |             |             |                            |                                                   |                                            |              |                |             |
| <b>E-Mail</b>                                    | pekdag@balikesir.edu.tr                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |             |             |                            |                                                   |                                            |              |                |             |