| Business Administration (English) | | | | |
|-----------------------------------|--------------------|----------------------|------------------|--|
| Bachelor | TR-NQF-HE: Level 6 | QF-EHEA: First Cycle | EQF-LLL: Level 6 | |

Course Introduction and Application Information

| Course Code: | UNI245 | | | | | |
|---|--------------------------------------|---------------------------------|----------------------------|-------------------------------|--|--|
| Course Name: | Economics of Technology & Innovation | | | | | |
| Semester: | Fall | Fall | | | | |
| Course Credits: | ECTS | ECTS | | | | |
| | 5 | | | | | |
| Language of instruction: | English | | | | | |
| Course Condition: | | | | | | |
| Does the Course Require Work Experience?: | No | | | | | |
| Type of course: | University Elective | | | | | |
| Course Level: | Bachelor | TR-NQF-HE:6. Master`s Degree | QF- EHEA:First Cycle | EQF-LLL:6. Master`s Degree | | |
| | | | | | | |
| Mode of Delivery: | Face to face | | | | | |
| Course Coordinator: | Doç. Dr. AYFER USTABAŞ | | | | | |
| Course Lecturer(s): | Doç. Dr. AYFER USTABAŞ | | | | | |
| Course Assistants: | | | | | | |

Course Objective and Content

| Course Objectives: | The aim of the course is to provide students with a general comprehension about the crucial impacts of technical and technological progresses on economic development. |
|--------------------|---|
| Course Content: | Innovations and inventions in the waves of technical change, Schumpeter's theories on technical and technological changes, contemporary theories of innovation in relation to firm behaviour. |

Learning Outcomes

The students who have succeeded in this course;

- 1) Comprehend the crucial impacts of technical and technological progresses on economic development.
- 2) Have a comprehensive knowledge of Schumpeter's theories.
- 3) Learn the difference between inveentions and inovations.
- 4) Learn the modern theories on the economics of technology.

Course Flow Plan

| Week | Subject | Related Preparation |
|------|--|---------------------|
| 1) | Schumpeter's Theories | |
| 2) | Schumpeter's Theories | |
| 3) | Theories of Entrepreneurship | |
| 4) | Theories of Entrepreneurship | |
| 5) | The Rise of Technology, Industrial Revolution | |
| 6) | The Age of Electricity, Innovations in Oil and Chemicals-Synthetic Materials | |
| 7) | Mass Production and Automobile | |
| 8) | MIDTERM | |
| 9) | Electronics and Computers | |
| 10) | Success and Failure in Industrial Innovation | |
| 11) | Innovation and Firm Strategies | |
| 12) | National Systems of Innovation | |
| 13) | Technology and Economic Growth | |
| 14) | International Trade Performance, Diffusion of Technology | |

Sources

| Course Notes / Textbooks: | The Economics of Industrial Revolution, Chris Freeman and Luc Soete 3rd Ed. Cassel, London, 1997 |
|---------------------------|--|
| References: | Yenilik İktisadı, Chris Freeman and Luc Soete, Trans. Ergün Türkcan, Tübitak, Ankara, 2003 |

| Course Learning Outcomes | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| Program Outcomes | | | | |
| 1) Using other social sciences and mathematics, they have a broad and interdisciplinary perspective on business and management sciences. | | | | |
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| 2) They have knowledge and skills about different functions and interactions of the enterprise. | | | | |
| 3) They can use different theoretical approaches to understanding and solving various business problems. | | | | |
| 4) Being aware of the needs of society, they use business knowledge to meet these needs. | | | | |
| 5) They have knowledge depthly about current problems of Turkey and Global Business World's | | | | |
| 6) They can determine the objectives of the institution in which they are involved, taking into account the market needs and economic conditions. | | | | |
| 7) They can solve complex business problems by using various statistical techniques and numerical methods and makes analysis by using statistical programs effectively. | | | | |
| 8) They can use a foreign language at least B1 General Level in terms of European Language Portfolio criteria according to the education level of a foreign language. | | | | |
| 9) They can develops teamwork, negotiation, leadership and entrepreneurship skills. | | | | |
| 10) They have the knowledge of universal ethical values, social responsibility awareness and sufficient level of labor law. | | | | |
| 11) They can identify the individual learning needs and carries out studies to correct them by developing positive attitudes about lifelong learning. | | | | |
| 12) They can express their ideas and solutions both written and orally, and if required they can present and publish them on both national and international platforms. | | | | |
| 13) They use information and communication technologies together with computer software at the advanced level of European Computer Driving License required by the field. | | | | |

| No Effect | 1 Lowest | 2 Average | 3 Highest |
|-----------|----------|-----------|-----------|
| | | | |

| | Program Outcomes | Level of Contribution |
|-----|---|--------------------------|
| 1) | Using other social sciences and mathematics, they have a broad and interdisciplinary perspective on business and management sciences. | |
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Assessment & Grading

| Semester Requirements | Number of Activities | Level of Contribution |
|-----------------------------|----------------------|-----------------------|
| Midterms | 1 | % 40 |
| Final | 1 | % 60 |
| total | | % 100 |
| PERCENTAGE OF SEMESTER WORK | | % 40 |
| PERCENTAGE OF FINAL WORK | | % 60 |
| total | | % 100 |

Workload and ECTS Credit Calculation

| Activities | Number of Activities | Preparation for the Activity | Spent for the Activity Itself | Completing the Activity Requirements | Workload |
|-----------------------------|----------------------|------------------------------|-------------------------------|--------------------------------------|----------|
| Course Hours | 14 | 1 | 3 | | 56 |
| Study Hours Out of Class | 14 | 0 | 2 | | 28 |
| Midterms | 1 | 15 | 1 | | 16 |
| Final | 1 | 25 | 1 | | 26 |
| Total Workload | | | | | 126 |