AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Technology and Industrialization								
Course Code	ECO428		Couse Level	First Cycle (Bachelor's Degree)					
ECTS Credit	6	Workload	150 *(Hours)*	Theory	3	Practice	0	Laboratory	0
Objectives of the Course	The aim of this course is to provide an introduction to the theory of technology policy and various tools available in designing, implementing, and evaluating technology policy. This course aims to help students gain knowledge about the economics of technological change, measurement of technological activities, aims and means of technology policy, and the practice of technology policy around the world.								
Course Content	Industrial Dynamics, Historical Approach on Technological Change, Theories of Technical Change , Policy Tools, National and Regional Innovation Systems, Country Experiences on Technological Change and Policy.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Discussion, Individual Study								
Name of Lecturer(s)									

Prerequisites & Co-requisities	
ECTS Requisite	120

Assessment Methods and Criteria		
Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	70

Recommended or Required Reading	
1	C. FREEMAN - L. SOETE, Yenilik İktisadı, Çev. Ergun Türkcan, Tübitak Yayınları, Ankara, 2003.
2	Kahraman EMMİOĞLU, Türkiye'nin Sanayileşme Dinamikleri, Elips Kitapları, 2013.

Week	Weekly Detailed Course Contents	
1	Theoretical	Industrial Dynamics: Introduction and Basic Concepts
2	Theoretical	Historical Approach on Technological Change
3	Theoretical	Economic Growth and Development: The Importance of Technology
4	Theoretical	Theories of Technical Change (Neoclassical Theory)
5	Theoretical	Theories of Technology Policy (Evolutionary Theory)
6	Theoretical	Technology and Globalization
7	Theoretical	Measurement of Technology: Inputs and Outputs
8	Intermediate Exam	Midterm Examination
9	Theoretical	Technology Adoption, Diffusion and Transfer
10	Theoretical	Policy Tools, National and Regional Innovation Systems
11	Theoretical	Policy Tools, National and Regional Innovation Systems
12	Theoretical	Country Experiences on Technological Change and Policy
13	Theoretical	Country Experiences on Technological Change and Policy
14	Theoretical	Technological Policy and National Innovation System in Turkey
15	Theoretical	General Assessment
16	Final Exam	Final Examination
17	Final Exam	Final Examination

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	3	42
Reading	14	0	2	28
Individual Work	14	0	3	42
Midterm Examination	1	15	1	16

Final Examination	1	21	1	22
			Total Workload (Hours)	150
			[Total Workload (Hours) / 25*] = **ECTS**	6
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	Is aware of the economics of technological change.
2	Measures the technological activities.
3	Explains the aims and means of technology policy.
4	Is aware of the practice of technology policy around the world.
5	Learn the theories of technological change.

Programme Outcomes *(Economics)*	
1	It defines and evaluates the basic economic concepts, theories, and methods.
2	It offers a basic level of policy proposals towards current economic problems.
3	It analyzes in the context of economic and social events in a historical perspective.
4	It explains the role of economic actors (such as government, company, or household) in the economy.
5	It follows national and international economic indicators and developments and it uses economic knowledge and methods in different areas.
6	Itprovides methods, tools and techniques necessary for the modelling and analysis of economic data and evaluates outcomes accordingly.
7	It defines economic systems, decision-making, policies and problems and it provides feedback about them.
8	It benefits from other disciplines tht contribute to economic basis and holds a basic knowledge of these disciplines.
9	It explains and comments on economic growth, development and productivity problems on basic grounds.
10	It provides sufficient know-how in sub-branches such as public economics, industry, agriculture, environment and natural resources, labor, knowledge and ownership of the economy, international finance, money, in political economy and econometrics.
11	It defines and evaluates the concept of business on basic grounds.
12	It provides a sufficient level of legal know-howthat may be demanded from high skill labor in both public and private sectors.
13	It defines the role of innovation, creativity and technology in the dynamic global economy.
14	It shows skills that will be useful for future employment opportunities and the working environment.
15	It considers science as a rational individual with professional and ethical responsibility.

Contribution of Learning Outcomes to Programme Outcomes *1:Very Low, 2:Low, 3:Medium, 4:High, 5:Very High*

	L1	L2	L3	L4
P1	3	4	3	4
P2	4	3	4	3
P4	3	4	3	4
P5	2	2	2	2
P7	2	3	2	3
P9	4	4	4	4
P13	4	4	4	4
P14	3	2	3	2