

Dentistry (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:	Spring		
Course Credits:	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</div> <div>QF-EHEA:First Cycle</div> <div>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 inventions and innovations.
- 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 - Program Learning Outcome Relationship

Course Learning Outcomes	1	2	3	4
Program Outcomes				
1) Has basic and up-to-date knowledge in the field of dentistry, follows scientific publications, and applies evidence-based data to his/her professional practice.				
2) Knows well and effectively uses devices, tools, and materials specific to diagnosis and treatment in the field of dentistry.				
3) Evaluates the knowledge in the field of dentistry critically, integrates it with the knowledge of disciplines in the field of health, uses it by analyzing and synthesizing it.				
4) Produces projects related to the field of dentistry, can work with other health disciplines, takes part as a member of the research team and evaluates and reports the results obtained at a scientific level.				
5) Uses information that will contribute to the dentistry profession during practice, takes responsibility, and produces solutions in unforeseen situations.				
6) Shares, compares, and exchanges dental knowledge with professional colleagues in social and scientific environments in written, verbal, and visual forms.				
7) Within the framework of social, scientific, and ethical values including patient privacy, communicates with patients and their relatives, knows all the characteristics of the patient, and recommends the most appropriate treatment with a patient-centered approach.				
8) Follows technological developments, participates in national and international studies, and shares and presents own observations, experiences, and research to further advance dental practices.				
9) By adopting the principle of lifelong learning throughout the dentistry profession, follows current evidence-based dental knowledge and uses it during his professional practice.				
10) During dental practice, in cases such as abuse and addiction, performs the treatment by exhibiting the behaviors required by social ethics and legal rules, and collects and records the relevant data.				
11) Uses basic and current knowledge in the field of dentistry during professional practice for the benefit of society within the framework of national values and country realities.				
12) In natural disasters and emergency cases, takes the protective measures required by the dentistry profession; performs professional practices that benefit patients and society				
13) Generates ideas regarding health policy in dentistry, prioritizes individual and public				

health, and carries out preventive and therapeutic medical practices within the framework of scientific, ethical, and quality processes.	1	2	3	4
Course Learning Outcomes				
14) Differentiates the signs and symptoms commonly encountered in the dentistry profession, makes a treatment plan and refers when necessary, and manages diseases and clinical situations regarding their urgency and patient priority.				
15) Can assume the leadership responsibility of the team he/she works for, manage it following scientific criteria, and support the professional development of the team.				

Course - Learning Outcome Relationship

No Effect	1 Lowest	2 Average	3 Highest

	Program Outcomes	Level of Contribution
1)	Has basic and up-to-date knowledge in the field of dentistry, follows scientific publications, and applies evidence-based data to his/her professional practice.	
2)	Knows well and effectively uses devices, tools, and materials specific to diagnosis and treatment in the field of dentistry.	
3)	Evaluates the knowledge in the field of dentistry critically, integrates it with the knowledge of disciplines in the field of health, uses it by analyzing and synthesizing it.	
4)	Produces projects related to the field of dentistry, can work with other health disciplines, takes part as a member of the research team and evaluates and reports the results obtained at a scientific level.	
5)	Uses information that will contribute to the dentistry profession during practice, takes responsibility, and produces solutions in unforeseen situations.	
6)	Shares, compares, and exchanges dental knowledge with professional colleagues in social and scientific environments in written, verbal, and visual forms.	
7)	Within the framework of social, scientific, and ethical values including patient privacy, communicates with patients and their relatives, knows all the characteristics of the patient, and recommends the most appropriate treatment with a patient-centered approach.	
8)	Follows technological developments, participates in national and international studies, and shares and presents own observations, experiences, and research to further advance dental practices.	
9)	By adopting the principle of lifelong learning throughout the dentistry profession, follows	

	current evidence-based dental knowledge and uses it during his professional practice.	
10)	During dental practice, in cases such as abuse and addiction, performs the treatment by exhibiting the behaviors required by social ethics and legal rules, and collects and records the relevant data.	
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12)	In natural disasters and emergency cases, takes the protective measures required by the dentistry profession; performs professional practices that benefit patients and society	
13)	Generates ideas regarding health policy in dentistry, prioritizes individual and public health, and carries out preventive and therapeutic medical practices within the framework of scientific, ethical, and quality processes.	
14)	Differentiates the signs and symptoms commonly encountered in the dentistry profession, makes a treatment plan and refers when necessary, and manages diseases and clinical situations regarding their urgency and patient priority.	
15)	Can assume the leadership responsibility of the team he/she works for, manage it following scientific criteria, and support the professional development of the team.	

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