

Dentistry			
Bachelor	TR-NQF-HE: Level 6	QF-EHEA: First Cycle	EQF-LLL: Level 6

Course Introduction and Application Information

Course Code:	UNI031		
Course Name:	Technological Transformation in Defense Industry		
Semester:	Spring		
Course Credits:	<div>ECTS</div> <div>5</div>		
Language of instruction:			
Course Condition:			
Does the Course Require Work Experience?:	No		
Type of course:	University Elective		
Course Level:	<div> <div>Bachelor</div> <div>TR-NQF-HE:6. Master`s Degree</div> <div>QF-EHEA:First Cycle</div> <div>EQF-LLL:6. Master`s Degree</div> </div>		
Mode of Delivery:	Face to face		
Course Coordinator:	Prof. Dr. FAHRİ ERENEL		
Course Lecturer(s):	Prof.Dr. Fahri Erenel		
Course Assistants:			

Course Objective and Content

Course Objectives:	To create awareness by explaining the developments in our national defense industry to our students, to make them proud of the level reached by our country, to reveal different options for career road maps.
Course Content:	To examine the development process of our national defense industry, the legislation, human resources, organizational structure and financial resources of our defense industry, to analyze the

necessity of a domestic and national defence industry with students, the defense industry. To provide information about the trainings given in our country, to examine technology and Resources and Development Management Activities, to analyze the project management process, clustering and completed project processes, to introduce warfare, weapons and tools.

Learning Outcomes

The students who have succeeded in this course;

- 1) Knowing why a national and domestic defence industry is necessary.
- 2) Analysing how the level of our industry reached its current situation within the historical process.
- 3) Being informed about the projects carried out under the concept of project management.
- 4) Knowing the activities of Resources and Development Management Activities and technology management.
- 5) Knowing how to monitor and analyse developments in the field of defense industry

Course Flow Plan

Week	Subject	Related Preparation
1)	-Information on how the course is processed -The evolution of war -The development process of our defense industry	
2)	-Definition of defense industry, market characteristics of defense industry, characteristics of defense industry products, characteristics of defense industry firms, importance of defense industry	
3)	-Our defense industry facilities and export capacity	
4)	-Human resources management and needs in defense industry	
5)	- Resources and Development Management Activities and technology management in defense industry	
6)	-Introducing our original land warfare weapons and vehicles (Altay tank, storm howitzers, national infantry rifle, etc.)	
7)	An Overview	
8)	Midterm Exam	
9)	Introducing our original air warfare weapons and vehicles (attack helicopter, unmanned aerial vehicles, etc.)	
10)	- Introducing the original naval warfare weapons and vehicles (National ship, Anatolian amphibian ship, etc.)	
11)	-Robotic systems and artificial intelligence studies	

12)	- Cyber security	
13)	- Military of the future	
14)	- Anti-terrorism, Euphrates Shield and Olive branch operation and weapon systems	
15)	An Overview	
16)	Final Exam	

Sources

Course Notes / Textbooks:	Savunma Sanayi Başkanlığı Web Sayfası Defence Industry Directorate Web Page Savunma Teknolojileri Merkezi Web Sayfası Defence Technology Center Web Page
References:	Savunma Sanayi Alanı İle İlgili Web Sayfaları Web pages related to defense industry area

Course - Program Learning Outcome Relationship

Course Learning Outcomes	1	2	3	4	5
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.	1	2	3	4	5
Course Learning Outcomes					
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.					
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.	
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.	
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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
Attendance	14	% 10
Homework Assignments	1	% 15
Midterms	1	% 30
Final	1	% 45
total		% 100
PERCENTAGE OF SEMESTER WORK		% 55
PERCENTAGE OF FINAL WORK		% 45
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	3			42
Study Hours Out of Class	14	3			42
Presentations / Seminar	4	2			8
Homework Assignments	1	8			8
Quizzes	2	2			4
Midterms	1	4			4
Final	1	6			6
Total Workload					114