

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

Course Introduction and Application Information

Course Code:	DENT215		
Course Name:	Fundamentals of Restorative Dentistry		
Semester:	Fall		
Course Credits:	ECTS 2		
Language of instruction:	English		
Course Condition:			
Does the Course Require Work Experience?:	No		
Type of course:	Compulsory Courses		
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:	Prof. Dr. TUĞBA TOZ AKALIN		
Course Lecturer(s):	Dr Tuğba Toz Akalin		
Course Assistants:			

Course Objective and Content

Course Objectives:	To teach the histological structure of dental tissues, dental caries etiology, microbiology, immunology, dental caries types and classification, caries removal, cavity principles, caries development theories, caries risk, and treatment strategies.
Course Content:	The course content consists of histology of dental tissues, etiology of dental caries, microbiology, immunology, types of dental caries, classification, caries removal, cavity principles, caries

development theories, caries risk and treatment strategies.

Learning Outcomes

The students who have succeeded in this course;

- 1) Knows the structure and histology of the tooth hard tissues
- 2) Knows the physicochemical properties of tooth hard tissues
- 3) Has knowledge about dental caries and its types
- 4) Has knowledge of the etiology of dental caries, saliva and dental plaque.
- 5) Has knowledge of the microbiology and immunology of dental caries
- 6) Knows the risk of dental caries, risk assessment and risk management

Course Flow Plan

Week	Subject	Related Preparation
1)	Tooth Development	
2)	Enamel	
3)	Dentin	
4)	Cement	
5)	Etiology of dental caries	
6)	Biofilms in caries development	
7)	Caries Diagnosis and removal of caries	
8)	caries risk assessment and management	
9)	enamel caries	
10)	dentin caries	
11)	demineralisation and remineralisation	
12)	saliva and caries development	
13)	fundamentals in tooth preparation	
14)	class I cavity preparation	
15)	Class II cavity preparation	
16)	class IV-V cavity preparation	
17)	liner application	

18)	amalgam application and polishing	
19)	non-carious lesions	
20)	dentin hypersensitivity	
21)	vital pulp therapy	
22)	midterm exam	

Sources

Course Notes / Textbooks:	Roberson, Theodore, Harald O. Heymann, and Edward J. Swift Jr. Sturdevants art and science of operative dentistry. Elsevier Health Sciences, 2006
References:	Roberson, Theodore, Harald O. Heymann, and Edward J. Swift Jr. Sturdevants art and science of operative dentistry. Elsevier Health Sciences, 2006

Course - Program Learning Outcome Relationship

Course Learning Outcomes	1	2	3	4	5	6
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	2	2	2	2	2
2) Knows well and effectively uses devices, tools, and materials specific to diagnosis and treatment in the field of dentistry.	3	3	3	3	3	3
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.	3	3	3	3	3	3
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. Course Learning Outcomes	1	2	3	4	5	6
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.	3	3	3	3	3	3
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,	2

	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
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.	3
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.	
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.	3
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	28	1	1		56
Midterms	1	6	1		7
Final	1	8	1		9
Total Workload					72