

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

## Course Introduction and Application Information

Course Code:	DENT315		
Course Name:	Introduction to Restorative Dentistry		
Semester:	Fall		
Course Credits:	<div>ECTS</div> <div>2</div>		
Language of instruction:	English		
Course Condition:			
Does the Course Require Work Experience?:	No		
Type of course:	Compulsory Courses		
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. TUĞBA TOZ AKALIN		
Course Lecturer(s):	Dr Tuğba Toz Akalin		
Course Assistants:			

## Course Objective and Content

Course Objectives:	The course aims to teach diagnosis and treatment planning in restorative dental treatment, filling materials such as amalgam, composite, cement, cavity liners, dentin bonding systems, reasons for restoration failure, restorative resin materials, application of adhesive systems, restoration of teeth with excess material loss.
Course	Diagnosis and treatment planning in restorative dentistry, filling materials such as amalgam,

Content:	composite, cement, cavity lining materials, dentin bonding systems, reasons for the failure of restoration, restorative resin materials, application of adhesive systems, restoration of teeth with excess material loss
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## Learning Outcomes

The students who have succeeded in this course;

- 1) Knows how to diagnose and makes a diagnosis-oriented treatment plan in restorative dental treatment.
- 2) Knows hand instruments used in restorative dentistry, cement, cavity lining materials, filling material such as amalgam and composite, the advantages and physical properties of amalgam, and its toxicity.
- 3) Knows dentin bonding systems, restorative resin materials, adhesive systems and how they are applied.
- 4) Knows direct and indirect pulp capping, how to restore endodontically treated teeth and teeth with excessive substance loss.
- 5) Knows how to apply fissure sealant to prevent caries development and how to remove dentin sensitivity.
- 6) Knows procedures for aesthetic purposes such as teeth whitening, restorative removal of diastema, dental lamina applications.

## Course Flow Plan

Week	Subject	Related Preparation
1)	Tooth Development	
1)	Clinical rules of ergonomics and clinical use	
2)	Diagnosis and Treatment Planning in Conservative Dentistry	
5)	Introduction of hand tools used in conservative treatment	
6)	Dental Filling materials; Cements, Cavity Lining Agents	
7)	Amalgam; Advantages and, Physical properties of amalgam	
8)	Reasons for failure of amalgam restoration, Amalgam toxicology	
12)	Direct and Indirect Pulp Capping	
13)	Restoration of Endodontically Treated Teeth - Fiber Restorations	
14)	Restoration of teeth with excessive tooth substance loss; Pin restorations	
15)	Inlays and Onlays,	
16)	Fissure Sealant Application (Noninvasive), Fissure Sealant Application (Invasive), Protective Resin Application	
17)	Traumatic dental hard tissue loss	

19)	Repair of Restoration (Amalgam, Composite, Fractured Restoration)	
20)	Removal of dentin sensitivity (Chemical Agents, Laser, and Restorative approaches)	
23)	Dental laminates	
24)	Removal of Caries by Alternative Mechanical Methods (Air Abrasion, Air Polishing, Ultrasonic, Sono Abrasion etc.)	
25)	Caries Removal with Chemomechanical Methods, Caries Removal with Laser	
26)	Use of Laser in Restorative Dentistry	

## Sources

Course Notes / Textbooks:	Richard S. Schwartz, Thomas Hilton, J. William Robbins, James B. Summitt. Fundamentals of Operative Dentistry: a contemporary approach Quintessence Publishing Co, 2006. Fejerskov, Ole, and Edwina Kidd, eds. Dental caries: the disease and its clinical management. John Wiley & Sons, 2009.
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## 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) 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.						
<b>Course Learning Outcomes</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
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.						
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
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	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.	
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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
Midterms	1	% 40
Final	1	% 60
<b>total</b>		<b>% 100</b>
PERCENTAGE OF SEMESTER WORK		% 40
PERCENTAGE OF FINAL WORK		% 60
<b>total</b>		<b>% 100</b>

### 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	26	0	1		26
Midterms	1	4	1		5
Final	1	6	1		7
<b>Total Workload</b>					<b>38</b>