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

# **Course Introduction and Application Information**

Course Code:	DENT312	DENT312								
Course Name:	Advanced C	Clinical Restorative Dentis	stry							
Semester:	Spring	Spring								
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	QF- EHEA:First Cycle	EQF-LLL:6. Master`s Degree						
Mode of Delivery:	Face to face	9								
Course Coordinator:	Prof. Dr. TUĞBA TOZ AKALIN									
Course Lecturer(s):	Dr Tuğba Toz Akalın									
Course Assistants:										

### **Course Objective and Content**

Course Objectives:	To teach the definition of dental caries, its etiology, microbiology, immunology and types of dental caries. To raise awareness about caries diagnosis methods and individual caries prophylaxis, risk assessment and caries treatment with minimal approaches. To inform students about current approaches in restorative dentistry.	
Course	Dental caries etiology, microbiology, immunology, dental caries types and classification, minimally	

Content:

invasive dental caries treatment strategies and current approaches in restorative dentistry constitute the course content.

#### **Learning Outcomes**

The students who have succeeded in this course;

- 1) Identifies tooth decay and knows how to detect it in the mouth.
- 2) Knows how to treat tooth decay with minimally invasive methods
- 3) Determines the risk of caries in the patient and knows individual caries prophylaxis.
- 4) Knows how to diagnose and treat non-carious cervical lesions.
- 5) Knows how to diagnose and treat dentine hypersensitivity.
- 6) knows restoration and repair.
- 7) Knows current matrix systems
- 8) Knows the restorative approach to dental traumas

#### **Course Flow Plan**

Week	Subject	Related Preparation
1)	Clinical features of dental caries Determination and evaluation of DMFT and DMFS indices	· Sturdevant's Art and Science of Operative Dentistry, Elsevier. · Craig's Restorative Dental Materials, Elsevier. · Fundamentals of Operative Dentistry: A Contemporary Approach, Quintessence. · Textbook of Operative Dentistry, Jaypee. · Dental Caries : Principles and Management/ edited by Zhou Xuedong. Springer, · Essentials of Dental Caries Edwina Kidd, Ole Fejerskov Edition: Fourth edition. Oxford
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2)	Classification of ICDAS and Radiographic Caries Classification	· Sturdevant's Art and Science of Operative Dentistry, Elsevier. · Craig's Restorative Dental Materials, Elsevier. · Fundamentals of Operative Dentistry: A Contemporary Approach, Quintessence. · Textbook of Operative Dentistry, Jaypee. · Dental Caries : Principles and Management/ edited by Zhou Xuedong. Springer, · Essentials of Dental Caries Edwina Kidd, Ole Fejerskov Edition: Fourth edition. Oxford
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3)	Determination of caries risk	· Sturdevant's Art and Science of Operative Dentistry, Elsevier. · Craig's Restorative Dental Materials, Elsevier. · Fundamentals of Operative Dentistry: A Contemporary Approach, Quintessence. · Textbook of Operative Dentistry, Jaypee. · Dental Caries: Principles and Management/ edited by Zhou Xuedong. Springer, · Essentials of Dental Caries Edwina Kidd, Ole Fejerskov Edition: Fourth edition. Oxford
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4)	Advanced Caries diagnostic methods	· Sturdevant's Art and Science of Operative Dentistry, Elsevier. · Craig's Restorative Dental Materials, Elsevier. · Fundamentals of Operative Dentistry: A Contemporary Approach, Quintessence. · Textbook of Operative Dentistry, Jaypee. · Dental Caries : Principles and Management/ edited by Zhou Xuedong. Springer, · Essentials of Dental Caries Edwina Kidd, Ole Fejerskov Edition: Fourth edition. Oxford
4)	Caries diagnostic methods	· Sturdevant's Art and Science of Operative Dentistry, Elsevier. · Craig's Restorative Dental Materials, Elsevier. · Fundamentals of Operative Dentistry: A Contemporary Approach, Quintessence. · Textbook of Operative Dentistry, Jaypee. · Dental Caries : Principles and Management/ edited by Zhou Xuedong. Springer, · Essentials of Dental Caries Edwina Kidd, Ole Fejerskov Edition: Fourth edition. Oxford
5)	Remineralization agents and methods (toothpaste, oral hygene product) (fluoride, arginine, novamin)	· Sturdevant's Art and Science of Operative Dentistry, Elsevier. · Craig's Restorative Dental Materials, Elsevier. · Fundamentals of Operative Dentistry: A Contemporary Approach, Quintessence. · Textbook of Operative Dentistry, Jaypee. · Dental Caries : Principles and Management/ edited by Zhou Xuedong. Springer, · Essentials of Dental Caries Edwina Kidd, Ole Fejerskov Edition: Fourth edition. Oxford
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6)	Individuel Caries	Sturdevant's Art and Science of Operative Dentistry, Elsevier. · Craig's

	Prophylaxis	Restorative Dental Materials, Elsevier. · Fundamentals of Operative Dentistry: A Contemporary Approach, Quintessence. · Textbook of Operative Dentistry, Jaypee. · Dental Caries : Principles and Management/ edited by Zhou Xuedong. Springer, · Essentials of Dental Caries Edwina Kidd, Ole Fejerskov Edition: Fourth edition. Oxford
6)	ICON Resin infiltration	Sturdevant's Art and Science of Operative Dentistry, Elsevier. · Craig's Restorative Dental Materials, Elsevier. · Fundamentals of Operative Dentistry: A Contemporary Approach, Quintessence. · Textbook of Operative Dentistry, Jaypee. · Dental Caries : Principles and Management/ edited by Zhou Xuedong. Springer, · Essentials of Dental Caries Edwina Kidd, Ole Fejerskov Edition: Fourth edition. Oxford
7)	Midterm	-
8)	Non-carious cervical lesions (classification)	· Sturdevant's Art and Science of Operative Dentistry, Elsevier. · Craig's Restorative Dental Materials, Elsevier. · Fundamentals of Operative Dentistry: A Contemporary Approach, Quintessence. · Textbook of Operative Dentistry, Jaypee. · Dental Caries : Principles and Management/ edited by Zhou Xuedong. Springer, · Essentials of Dental Caries Edwina Kidd, Ole Fejerskov Edition: Fourth edition. Oxford
8)	Non-carious cervical lesions (etiology)	· Sturdevant's Art and Science of Operative Dentistry, Elsevier. · Craig's Restorative Dental Materials, Elsevier. · Fundamentals of Operative Dentistry: A Contemporary Approach, Quintessence. · Textbook of Operative Dentistry, Jaypee. · Dental Caries : Principles and Management/ edited by Zhou Xuedong. Springer, · Essentials of Dental Caries Edwina Kidd, Ole Fejerskov Edition: Fourth edition. Oxford
9)	Non-carious cervical lesions (treatment)	· Sturdevant's Art and Science of Operative Dentistry, Elsevier. · Craig's Restorative Dental Materials, Elsevier. · Fundamentals of Operative Dentistry: A Contemporary Approach, Quintessence. · Textbook of Operative Dentistry, Jaypee. · Dental Caries : Principles and Management/ edited by Zhou Xuedong. Springer, · Essentials of Dental Caries Edwina Kidd, Ole Fejerskov Edition: Fourth edition. Oxford
9)	Dentin hypersensitivity (etiology)	· Sturdevant's Art and Science of Operative Dentistry, Elsevier. · Craig's Restorative Dental Materials, Elsevier. · Fundamentals of Operative Dentistry: A Contemporary Approach, Quintessence. · Textbook of Operative Dentistry, Jaypee. · Dental Caries : Principles and Management/ edited by Zhou Xuedong. Springer, · Essentials of Dental Caries Edwina Kidd, Ole Fejerskov Edition: Fourth edition. Oxford
10)	Dentin hypersensitivity (treatment)	· Sturdevant's Art and Science of Operative Dentistry, Elsevier. · Craig's Restorative Dental Materials, Elsevier. · Fundamentals of Operative Dentistry: A Contemporary Approach, Quintessence. · Textbook of Operative Dentistry,

		Jaypee. · Dental Caries : Principles and Management/ edited by Zhou Xuedong Springer, · Essentials of Dental Caries Edwina Kidd, Ole Fejerskov Edition: Fourth edition. Oxford
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11)	Clinical success in composite restorations	· Sturdevant's Art and Science of Operative Dentistry, Elsevier. · Craig's Restorative Dental Materials, Elsevier. · Fundamentals of Operative Dentistry: A Contemporary Approach, Quintessence. · Textbook of Operative Dentistry, Jaypee. · Dental Caries : Principles and Management/ edited by Zhou Xuedong Springer, · Essentials of Dental Caries Edwina Kidd, Ole Fejerskov Edition: Fourth edition. Oxford
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12)	Repair of Restoration	· Sturdevant's Art and Science of Operative Dentistry, Elsevier. · Craig's Restorative Dental Materials, Elsevier. · Fundamentals of Operative Dentistry: A Contemporary Approach, Quintessence. · Textbook of Operative Dentistry, Jaypee. · Dental Caries : Principles and Management/ edited by Zhou Xuedong Springer, · Essentials of Dental Caries Edwina Kidd, Ole Fejerskov Edition: Fourth edition. Oxford
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13)	Current matrix systems	· Sturdevant's Art and Science of Operative Dentistry, Elsevier. · Craig's Restorative Dental Materials, Elsevier. · Fundamentals of Operative Dentistry: A Contemporary Approach, Quintessence. · Textbook of Operative Dentistry, Jaypee. · Dental Caries : Principles and Management/ edited by Zhou Xuedong Springer, · Essentials of Dental Caries Edwina Kidd, Ole Fejerskov Edition: Fourth edition. Oxford

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14)	Restorative approach in dental trauma	· Sturdevant's Art and Science of Operative Dentistry, Elsevier. · Craig's Restorative Dental Materials, Elsevier. · Fundamentals of Operative Dentistry: A Contemporary Approach, Quintessence. · Textbook of Operative Dentistry, Jaypee. · Dental Caries : Principles and Management/ edited by Zhou Xuedong. Springer, · Essentials of Dental Caries Edwina Kidd, Ole Fejerskov Edition: Fourth edition. Oxford
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#### Sources

Course Notes / Textbooks:	<ul> <li>Sturdevant's Art and Science of Operative Dentistry, Elsevier.</li> <li>Craig's Restorative Dental Materials, Elsevier.</li> <li>Fundamentals of Operative Dentistry: A Contemporary Approach, Quintessence.</li> <li>Textbook of Operative Dentistry, Jaypee.</li> <li>Dental Caries: Principles and Management/ edited by Zhou Xuedong. Springer,</li> <li>Essentials of Dental Caries Edwina Kidd, Ole Fejerskov Edition: Fourth edition.</li> <li>Oxford</li> </ul>
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## **Course - Program Learning Outcome Relationship**

Course Learning Outcomes	1	2	3	4	5	6	7	8
Program Outcomes								
1) Has basic and up-to-date knowledge in the field of dentistry,								

follows scientific publications, and applies evidence-based data to Cishre photessing putcomes	1	2	3	4	5	6	7	8
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, ntegrates 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 evel.								
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.								
B) 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  From Secondar practices that be nefit patients and society	1	2	3	4	5	6	7	8
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.	
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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.	

### **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	0	1		28
Midterms	1	6	1		7
Final	1	6	1		7
Total Workload				42	