

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

Course Introduction and Application Information

Course Code:	DENT309		
Course Name:	Introduction to Orthodontics		
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:	Dr. Öğr. Üy. BEGÜM ASLAN		
Course Lecturer(s):	Ece Çetin		
Course Assistants:			

Course Objective and Content

Course Objectives:	The objective of this course is to provide information about the formation, development, developmental abnormalities, of hard and soft tissues in the craniofacial region during the prenatal and postnatal periods and orthodontic tooth movement .
Course Content:	Within the scope of this course, topics such as the prenatal and postnatal development of soft and hard tissues, formation of cleft lip and palate, fundamental principles of bone tissue

development, postnatal growth of the maxilla-mandibular complex, biomechanics and histology of tooth movement, and others will be discussed.

Learning Outcomes

The students who have succeeded in this course;

- 1) The individual gains the ability to understand the embryological processes in the craniofacial region and can discuss normal and abnormal somatic growth as well as craniofacial growth.
- 2) They can accurately and comprehensively diagnose abnormalities in craniofacial (skull and facial region) development.
- 3) They can diagnose clefts of the lip and palate.
- 4) They can sequence the stages of dentition development, differentiate the normal and abnormal development of deciduous and permanent teeth, and make diagnoses.
- 5) They can identify dental and skeletal malocclusions.
- 6) They can perform cephalometric analysis and model analysis.

Course Flow Plan

Week	Subject	Related Preparation
1)	Prenatal Development: Craniofacial Development and Development of Jaws	Preliminary study of the suggested sources
2)	Prenatal Development: Craniofacial Development and Development of Jaws (Soft Tissue II)	Preliminary study of the suggested sources
3)	Prenatal Development: Hard Tissue Development I (Bone deposition mechanisms, Growth Centers, Synchondrosis)	Preliminary study of the suggested sources
4)	Prenatal Development: Hard Tissue Development II (Prenatal and postnatal growth of the cranium)	Preliminary study of the suggested sources
5)	Prenatal and Postnatal Growth of Maxilla and Mandible	Preliminary study of the suggested sources
6)	Prenatal and Postnatal Growth of Maxilla and Mandible	Preliminary study of the suggested sources
7)	Cleft Lip and Palate: Etiology, Classification, Primary Treatment Approaches	Preliminary study of the suggested sources
8)	1st Midterm Exams	
9)	Orthodontic Tooth Movement: Histology and Biomechanics	Preliminary study of the suggested sources
10)	Orthodontic Forces and Tooth Movement	Preliminary study of the

		suggested sources
10)	Orthodontic Forces and Tooth Movement	Preliminary study of the suggested sources
11)	Primary Dentition	Preliminary study of the suggested sources
12)	Transition From Mixed Dentition to Permanent Dentition	Preliminary study of the suggested sources
13)	Overall Review	Preliminary study of the suggested sources

Sources

Course Notes / Textbooks:	1. Contemporary Orthodontics, Proffit WR et al. 3rd ed. Mosby, St. Louis, Missouri, 2000 2. Orthodontics: Current Principles and Techniques, Graber TM, Vanarsdall RL, 4th ed. Mosby, St. Louis Missouri, 2005
References:	1. Contemporary Orthodontics, Proffit WR et al. 3rd ed. Mosby, St. Louis, Missouri, 2000 2. Orthodontics: Current Principles and Techniques, Graber TM, Vanarsdall RL, 4th ed. Mosby, St. Louis Missouri, 2005

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. Course Learning Outcomes	1	2	3	4	5	6
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
total		% 100
PERCENTAGE OF SEMESTER WORK		% 40
PERCENTAGE OF FINAL WORK		% 60
total		% 100