AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Tooth Movements, Cell Biology and Genetic								
Course Code	ORD655		Couse Level	Third Cycle (Doctorate Degree)					
ECTS Credit	6	Workload	150 *(Hours)*	Theory	2	Practice	0	Laboratory	0
Objectives of the Course	Biomechanic basic principles								
Course Content	Biomechanic basic principles								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Discussion, Case Study								
Name of Lecturer(s)									

Assessment Methods and Criteria		
Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	60

Recommended or Required Reading	
1	Graber T, Wanarsdall R, Vig C. Orthodontics: current principles and techniques Elsevier inc , 4. baskı, 2005.
2	Proffitt W. R and Fields H. W., 1999; Contemporary Orthodontics., Mosby, US.

Week	Weekly Detailed Course Contents	
1	Theoretical	introduction to dental movements
2	Theoretical	force and its properties. effects on force distribution
3	Theoretical	response of bone and preiodontal tissues against normal function
4	Theoretical	response of bone and periodontal tissues to normal function
5	Theoretical	Force and hyalinization
6	Theoretical	optimum force
7	Theoretical	midterm exam
8	Theoretical	orthodontic tooth movements
9	Theoretical	phases of dental movements
10	Theoretical	theories about tooth movement
11	Theoretical	effects of force duration and reduction in force
12	Theoretical	anchorage and anchorage areas
13	Theoretical	appliences used for anchorage
14	Theoretical	final exam

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Lecture - Practice	14	0	2	28
Assignment	2	0	12	24
Individual Work	5	0	10	50
Midterm Examination	1	8	2	10

Final Examination	1	8	2	10
			Total Workload (Hours)	150
			[Total Workload (Hours) / 25*] = **ECTS**	6
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	tipping
2	parallel movement
3	extrusion
4	intrusion movement
5	Explain the factors that affect learning

Programme Outcomes *(Orthodontics Doctorate)*	
1	Must know the transition procedure from primary dentition to permanent dentition, tooth eruption guidance, the precausions for tooth absence and bad habbits.
2	May be able to diagnose the orthodontic malocclusion and able to present treatment alternatives for the case.
3	May be able to apply the analysis necessary for diagnosis, such as cephalometric analysis and model analysis and must know the occlusion.
4	Must know the orthdontic tooth movement, the force necessary for the tooth movement, and be able to take the precausions according to the unwanted tooth movements.
5	Must be able to diagnose the functional malocclusions and apply functional appliances.
6	Must be able to apply fixed treatment techniques used in our clinic such as edgewise, Roth, Alexander, MBT
7	Must be aware of the new treatment techniques and improvements in orthodontics.
8	Must know how the craniofacial complex developes and be able to follow the patient’s development and growth.
9	Must be able to know how to apply removable appliances and their fabrication and their effects.
10	Must know about the retention period for the patient in order to keep the treatment results stable.

Contribution of Learning Outcomes to Programme Outcomes *1:Very Low, 2:Low, 3:Medium, 4:High, 5:Very High*

	L1	L2	L3	L4	L5
P1	2	3	5	4	4
P2	3	4	2	4	4
P3	4	5	3	5	4
P4	5	4	3	4	5
P5	4	3	3	4	5
P6	3	2	4	4	5
P7	2	1	3	4	4
P8	1	2	2	5	4
P9	2	3	3	5	4
P10	3	3	2	4	5