

Graduate School of Health Sciences / Orthosis-Prothesis M.S.

2024 - 2025 Academic Year

PEDIATRIC ORTHOTICS

Syllabus

Course Description					
Name	Code	Semester	T+A Hour	Credit	ECTS
PEDIATRIC ORTHOTICS	OPZY1234790	Spring Semester	2+0	2	8
Prerequisites Courses					
Recommended Elective Courses					
Language of Instruction	Turkish				
Course Level	Second Cycle (Master's Degree)				
Course Type	Elective				
Course Coordinator	Assoc.Prof. Esra ATILGAN				
Name of Lecturer(s)	Prof.Dr. Yavuz YAKUT				
Assistant(s)					
Aim	To teach children orthotic applications for neurological and orthopedic problems.				
Course Content	This course contains; The basic principles of pediatric orthotics, Orthoses in Brachial plexus injuries, Patients with congenital deformities orthotics, Cerebral Palsy orthotics, Cerebral Palsy orthotics, Spina Bifida orthotics, Spina Bifida orthotics, Orthotics in muscle disorders, Orthotics in muscle disorders, Traumatic cases orthotics, Traumatic cases orthotics, Traumatic cases orthotics, Case discussion.				
Course Learning Outcomes			Teaching Methods	Assessment Methods	
It conveys the basic principles of pediatric orthosis.			10, 12, 5, 9	A	
Defines orthosis in congenital deformities.			10, 12, 16, 9	A	
Explains orthosis in Cerebral Paralysis.			10, 12, 18, 9	A	
Describes orthosis in Spina Bifida.			10, 12, 18, 9	A	
Explains orthosis in pediatric muscle diseases.			10, 12, 16, 9	A	
Teaching Methods	10: Discussion Method, 12: Problem Solving Method, 16: Question - Answer Technique, 18: Micro Teaching Technique, 5: Cooperative Learning, 9: Lecture Method				
Assessment Methods	A: Traditional Written Exam				
Lecture Schedule					
Sequence	Topics	Preliminary Preparation			
1	The basic principles of pediatric orthotics.	Source 5-Chapter 22	Source 4-Chapter 16	Source 3-Chapter 29	
2	Orthoses in Brachial plexus injuries	Source 5-Chapter 22	Source 4-Chapter 16	Source 3-Chapter 29	
3	Patients with congenital deformities orthotics	Source 5-Chapter 22	Source 4-Chapter 16	Source 3-Chapter 29	
4	Cerebral Palsy orthotics	Source 5-Chapter 22	Source 4-Chapter 16	Source 3-Chapter 29	
6	Cerebral Palsy orthotics	Source 5-Chapter 22	Source 4-Chapter 16	Source 3-Chapter 29	
7	Spina Bifida orthotics	Source 5-Chapter 22	Source 4-Chapter 16	Source 3-Chapter 29	
8	Spina Bifida orthotics	Source 5-Chapter 22	Source 4-Chapter 16	Source 3-Chapter 29	
9	Orthotics in muscle disorders	Source 5-Chapter 22	Source 4-Chapter 16	Source 3-Chapter 29	
10	Orthotics in muscle disorders	Source 5-Chapter 22	Source 4-Chapter 16	Source 3-Chapter 29	
11	Traumatic cases orthotics	Source 5-Chapter 22	Source 4-Chapter 16	Source 3-Chapter 29	
12	Traumatic cases orthotics	Source 5-Chapter 22	Source 4-Chapter 16	Source 3-Chapter 29	
13	Traumatic cases orthotics	Source 5-Chapter 22	Source 4-Chapter 16	Source 3-Chapter 29	
14	Case discussion	Source 5-Chapter 22	Source 4-Chapter 16	Source 3-Chapter 29	
Evaluation Methods		Weight(%)			
Midterm Exam		50			
General Exam		50			

Resources
Podcast presentations prepared for
the course 1) AAOS Atlas of Orthoses and Assistive Devices Frank Gottschalk, MD, MB, BCh, 2013 2) Atlas of Amputations and Limb Deficiencies/Douglas G. Smith MD, 2013 3) Orthotics and Prosthetics in Rehabilitation/Lusardi & Jorge & Nielsen, 2013 4) Introduction to Orthotics/Breand Coppard, Helene Lohman, Fourth Edition, 2015 5) Orthotic Intervention for the Hand and Upper Extremity, Marylyn Jacobs, Noelle Austin, Second Edition, 2014 6) Prosthetics and Orthotics Lower limb and Spinal, Ron Seymour, 2002 7) Kas iskelet Sisteminde Pratik Ölçme ve Değerlendirme, Deniz Evcik, Pelikan, 2008 8) Fundamentals of amputation care and Prosthetics, Douglas Murphy, 2014 9) Phantom Limb Amputation, Embodiment, and Prosthetic Technology, Cassandra Crawford, 2014 10) Careers in Orthotics and Prosthetics, 2015 11) Biomechanics of Lower Limb Prosthetics, Springer, 2010 12) İletişim, Emel Bahar, Detay yay, 2012 13) The Management of Uncontrolled Movement, Mark Comerford, Elsevier, 2014 14) Perspectives on Loss and Trauma, John Harvey, Sage, 2013 15) Temel Kinezyo-Mekanik, N. Ekin AKALAN, Yener TEMELLİ, İstanbul Tıp Kitabevleri 16) İnsan Hareketinde Biyomekanik, Barney Leveau, Yavuz Yakut, Pelikan yay, 2014