



COURSE INFORMATION FORM

	Course Information					
Year of Curriculum	Course Title	Code	Semester	L+P Hour	Credits	ECTS
	Neuroplasticity and Motor Learning	5055007	I-II	3+0	3	7

Language of Instruction	Turkish
Course Level	Postgraduate
Department/Program	Department of Physiotherapy and Rehabilitation / Master's Degree with Thesis
Education Type	Formal
Course Type	Elective
Prerequisites	-
Department/Program Coordinator	Dr. Öğr. Üyesi Çağtay MADEN
Instructors	Dr. Öğr. Üyesi Zekiye İpek KATIRCI KIRMACI
Assistants	-
Objectives of the Course	The concept of neuroplasticity and neurophysiology, motor learning theories and principles applied during clinical practice in the field of neurological rehabilitation.
Course Content	Understanding neuroplasticity, understanding the theories and principles of motor learning and gaining the ability to apply them in the clinic
Teaching-Learning Methods and Techniques Used in the Course	Expression Discussion Question & Answer Preparing and / or Presenting a Report Drill & Practice Case Study Problem / Problem Solving Brainstorming
Internship of the Course (If there is)	-

Learning Outcomes	
1.	Defines the concept of neuroplasticity.
2.	Describe the theories and principles of Motor Learning.
3.	Defines motor learning based treatment approaches.
4.	Select appropriate motor learning approaches that can be used in neurological diseases and form the principles.
5.	Motor Follows current information about the results of learning-based approaches.

COURSE CONTENT	
Week	Topics
1	Functional Neuroanatomy
2	Adaptation of the Nervous System to Exercise
3	Adaptation of the Nervous System to Exercise
4	Neuroplasticity
5	Motor Learning Concept
6	Motor Learning Theories
7	Principles of Motor Learning
8	Midterm Exam
9	Motor learning concept in neurological rehabilitation
10	Current Literature
11	Current Literature
12	Current Literature
13	Current Literature
14	Current Literature
15	Final Exam

RECOMMENDED SOURCES		
<p>1. Tunca Yılmaz, Ö. (Editor). (2021). Neuroscience and Neuroplasticity in Neurological Rehabilitation Physical Therapy Applications. Hipokrat Publishing.</p> <p>2. Güçlü Gündüz, A., Bilgin, S., Öksüz, Ç., Ertekin Ö., & İyigün, G. (Eds.). (2018). Transfer of Motor Control Research to Clinical Practice (5th Edition). Hipokrat Publishing House.</p> <p>3. Karaduman, A. A., Yılmaz, Ö. T., & Akel, B. S. (Eds.). (2016). Physiotherapy and rehabilitation (Volume 3 Neurological-Cardiopulmonary Rehabilitation Physiotherapy). Hipokrat Publishing House.</p>		
ASSESSMENT		
IN-TERM STUDIES	QUANTITY	PERCENTAGE
Mid-terms	1	40
Quizzes		
Homework		
Attendance		
Practice		
Seminar		
Internship of the Course		
Project		
Field Survey		
Workshop		
Laboratory		
Presentation		
Final examination	1	60
Total	2	100
Contribution of Semester Studies to the Success Grade		
Contribution of the Final Exam to the Success Grade		
Total		

ECTS/WORKLOAD TABLE			
Activities	Quantity	Duration (Hour)	Total Workload (Hour)

Course Duration (Including the exam week: 15x Total course hours)	15	3	45
Hours for off-the-classroom study (Pre-study, practice)	15	3	45
Homework	15	3	45
Seminar			
Presentation	14	3	42
Practice			
Laboratory			
Internship of the Course			
Project			
Field Survey			
Workshop			
Others (.....)	1	1	1
Mid-terms	1	1	1
Quizzes	1	2	2
Homework(s)/Seminar(s)			
Final examination	1	1	1
Total Work Load			210
Total Work Load / 30 (h)			210/30
ECTS Credit of the Course			7

ASSOCIATING THE LEARNING OUTCOMES OF THE COURSE WITH THE PROGRAM OUTCOMES

Course Learning Outcomes	PO1	PO2	PO3	PO4	PO5	PO6
CLO1	5	2	4	5	1	2
CLO2	5	2	4	5	1	2
CLO3	5	2	4	5	1	2
CLO4	5	2	4	5	1	2
CLO5	5	4	1	5	1	5

CLO: Course Learning Outcomes PO: Programme Outcomes					
Contribution level	1. Very low	2. Low	3. Medium	4. High	5. Very High