Course Title	Code	Semester	Theoretical (hours/week)	Practice (hours/week)	Laboratory (hours/week)	ECTS
Motor Control and Learning Theories in Stroke Rehabilitation	**FTR 608**		**3**	**0**	**0**	**10**

Prerequisites	-
Course Language	Turkish
Course Type	Compulsory
Teaching Methods	lecture, presentation, discussion, team/group work, report preparation and/or presentation, drill-practise, case study, Problem solving
Instructor(s)	
Course Objective	The aim of this course in individuals who have had a stroke motor control and motor learning theories teach the basic principles of; to evaluate engine performance and extensively disorders, physiotherapy and rehabilitation programs as appropriate based on the current scientific literature to develop strategies to gain competencies to be able to design individualized.
Course Learning Outcomes	1. explain the theories of motor control and learning theory to neuroplasticity and functional recovery after stroke and analyzes its relationship with this. 2. Current approaches to motor learning (e.g., task-based learning, feedback strategies) and selects appropriate methods to evaluate in clinical practice. 3. motor control and learning based on the principles of design and gerekcelendirir individualized intervention programs for stroke rehabilitation based on scientific evidence.
References	1. Schmidt, R. A. & Lee, T. D. (2019). Motor control and learning: a Behavioral Emphasis (6th ed.). Human Kinetics. 2. Gillen, G. (2018). Stroke Rehabilitation: A Functional Activity-Based Approach. Elsevier. 3. Shumway-Cook, A. & Woollacott, M. H. (2017). Motor control: Translating research into clinical practice (5th ed.). Lippincott Williams & Wilkins. 4. It's Seltzer, M. E., Clarke, S., Cohen, L. G., Kwakkel, G., & Miller, R. H. (Eds.). (2014). Textbook of neural repair and rehabilitation (2nd ed.). Cambridge University Press. 5. Maier, M., et al. (2019). Neurorehabilitation After stroke engine based on Principles of Learning. Frontiers in neurology, 10, 580 6. SANKO University, e-resources (Pubmed, Springer, etc.)

WEEKLY COURSE TOPICS

WEEKS	DISCUSSION TOPICS TO BE PROCESSED
1.	the concepts of motor control and learning an introduction to basic definitions and historical development

2.	of the motor system, for the neurophysiological basis: cortical, subcortical and spinal mechanisms
3.	of motor control theories
4.	theories of motor learning
5.	post-stroke motor disorders: clinical presentation, evaluation, and changes in the nervous system
6.	Neuroplasticity: basic mechanisms of post-stroke restructuring processes
7.	task-based learning and motor re-education application examples in
8.	**Mid-Term Examination**
9.	error-based learning adaptive motor control and virtual reality applications
10.	in stroke rehabilitation of sensory-motor integration,
11.	motor learning protocols are designed with the principles of clinical application
12.	of current evidence-based practice and systematic reviews,
13.	student presentations – case analysis and intervention plan design
14.	evaluation and future research directions
15.	**Final Exam**

ECTS / WORK LOAD TABLE

Activities	**Number**	**Duration**	**Total Work Load**
Course	14	3	42
Laboratory	0	0	0
Practice	0	0	0
Field Study	0	0	0
Outclass course work hours (Self working / Teamwork / Preliminary work)	14	5	70
Presentations (Video preparation / Poster preparation / Oral presentation / Focus group discussion / Applying questionnaire/ Observation and report writing)	14	3	42
Seminars			
Project	2	48	96
Case study			
Role playing, dramatization			
Preparing and criticizing article			
Semester midterm exams			

total work load	**125/25**
ECTS course	**10**

EVALUATION SYSTEM

Midterm Studies	**Number**	**Contribution**
Mid-Term Exam		
Short Exam		
Laboratory		
Application		
Fieldwork		
Course-Specific Internship (if applicable)		
Assignments		
Presentations and Seminars	1	25%
Projects	1	25%
Other		
Total Mid-Term Work		50%
End-of-Semester Work		
Final		
Assignment	1	50%
Practical		
Laboratory		
Total Mid-Term Work		50
Contribution of Mid-Term Work to the Final Grade		50

RELATIONSHIPS BETWEEN COURSE LEARNING OUTCOMES AND PROGRAM QUALIFICATIONS

Program Qualifications		Learning Outcomes		
		LO1	**LO2**	**LO3**
1.	Accesses, interprets, and applies advanced and original knowledge in the field of physiotherapy and rehabilitation.		**4**	**4**
2.	Conducts original research plans that contribute to the field using scientific methods.		**4**	**4**
3.	With a commitment to lifelong learning, follows current developments and technologies in the field, develops existing methods and techniques, and designs and implements new applications.	**3**	**4**	**3**
4.	Adopts and implements an evidence-based approach in clinical decision-making processes. Acts in accordance with ethical principles in research and practice.		**4**	**4**
5.	Establishes effective collaboration in interdisciplinary projects, plans, manages, and executes scientific projects. Effectively shares scientific knowledge on national and international platforms.		**4**	**4**
6.	Performs advanced clinical and laboratory practices in various specialties. Contributes to undergraduate and graduate educational activities and mentors students.		**4**	**4**
7.	Contributes to the development of health policies that improve rehabilitation services and public health.	**3**	**4**	**4**
8.	Is knowledgeable about statistical methods frequently used in health studies. Selects, applies, and interprets appropriate statistical methods.			
9.	Contributes to expanding the boundaries of knowledge in the field by publishing at least one scientific article in national and/or international peer-reviewed journals.			**4**

Contribution to the level of proficiency: 1: Low **2:** Low/Moderate **3:** Moderate **4:** High **5:** Excellent