ECTS COURSE DESCRIPTION FORM

PART I (Senate Approval)

Offering School	Antalya Bilim University	**Offering Department**	Physical Therapy and Rehabilitation
Program(s) Offered to	Physical Therapy and Rehabilitation ☐ ☐ ☐		☐ ☐ ☐
Course Name	Neurophysiological Approaches II	**Course Code**	FTR 322
Level of Course	Undergraduate	**Type of Course**	Theoric, Pratical
Language of Instruction	Turkish	**ECTS Credits**	4

Hours per Week	Lecture:	2	Practical:	2	Studio:	
	Laboratory:		Recitation:		Other:	

Pre-requisites	None	**Co-requisites**	None
Registration Restriction	None	**Grading Mode**	Letter Grade

Educational Objective: To explain clinical features and causes of movement and dysfunction in upper motor neuron problems with neurophysiological and neurodevelopmental problems such as stroke and cerebral palsy, to understand and apply the measurement and evaluation methods used in stroke and cerebral palsy rehabilitation

Course Description: Clinical features after hemiplegia and different neurophysiological approaches used in its treatment (New Bobath, Johnston, Brunnstrom, etc.); theory and principles of neuroplasticity, motor control, and motor learning; To be able to draw and apply for a rehabilitation program considering the physiotherapy methods of functions and structures before and after rehabilitation and considering the biopsychosocial effects and results; Recognition and management of muscle tone/spasticity are covered in the course.

Learning Outcomes

LO1	Defines the clinical features seen after stroke and cerebral palsy, assosiate the neurophysiological approaches used in treatment.
LO2	Defines the normal movement and function and compares with movement and function impairments after stroke and cerebral palsy.
LO3	Understands and practices the basic and neurophysiological based measurement and assessment approaches used after stroke and cerebral palsy.
LO4	Defines the clinical problems after stroke and cerebral palsy, practices the clinical decision making process, plans the treatment program.
LO5	Compares the common and updated neurophysiological treatment/approaches with patient based approaches, chooses and practices basically.
LO6	
LO7	

PART II (Faculty Board Approval)

		Program Outcomes	LO1	LO2	LO3	LO4	LO5	LO6	LO7
Basic Outcomes (University-wide)	PO1	Ability to communicate effectively and write and present a report in Turkish and English.	✓						
	PO2	Ability to work individually, and in intra-disciplinary and multi-disciplinary teams.	✓	✓	✓	✓	✓		
	PO3	Recognition of the need for life-long learning and ability to access information , follow developments in science and technology, and continually reinvent oneself.	✓	✓	✓	✓	✓		
	PO4	Knowledge of project management, risk management, innovation and change management, entrepreneurship, and sustainable development.							
	PO5	Awareness of sectors and ability to prepare a business plan.							
	PO6	Understanding of professional and ethical responsibility and demonstrating ethical behavior.	✓	✓	✓	✓	✓		
Faculty Specific Outcomes	PO7	Having universal thoughts and values	✓	✓	✓	✓	✓		
	PO8	To be committed to academic and ethical values	✓	✓	✓	✓	✓		
	PO9	To provide qualified education, research and consultancy services at universal information and technology standards							
	PO10	To be open to new goals, strategies and action plans that will take undergraduate and graduate education / training programs and scientific studies further	✓	✓	✓	✓	✓		
	PO11	To support, maintain and increase interdisciplinary / multidisciplinary studies in the services provided.							
	PO12	To contribute and develop health policies for the benefit of the country.	✓	✓	✓	✓	✓		
Program Specific Outcomes	PO13	Explains the theoretical knowledge about basic medicine and clinical sciences with the main lines and relates them to physiotherapy.	✓						
	PO14	Applies Physiotherapy and Rehabilitation assessment methods, analyzes and interprets theoretical knowledge by associating	✓	✓	✓	✓	✓		
	PO15	Plans and implements the individual physiotherapy and rehabilitation program	✓			✓	✓		
	PO16	Records and archives assessment and treatment data	✓		✓	✓			
	PO17	Plans, conducts and presents a scientific research	✓	✓	✓	✓	✓		
	PO18	Has effective communication skills				✓			
	PO19	Defines professional duties and responsibilities legally and applies them within the framework of ethical principles.	✓			✓	✓		
	PO20	Has lifelong learning skills related to the profession	✓	✓	✓	✓	✓		

	PO21	Can use foreign language effectively to follow professional developments							
	PO22	Knows and applies quality, occupational health and safety issues related to the profession							

PART III (Department Board Approval)									
	Subject	Week	Details of Course Contents	LO1	LO2	LO3	LO4	LO5	LO6	LO7
Course Contents, Contribution of Course Contents to Learning Outcomes, and Methods for Assessing Learning of Course Contents	S1	1	Cerebrovascular accidents (description, neuroanatomy, risk factors)	A1/A4	A1/A4	A1/A4	A1/A4	A1/A4		
	S2	2	Clinical features after stroke, medical treatment, general rehabilitation principles, theoretical dimension of	A1/A4	A1/A4	A1/A4	A1/A4	A1/A4		
	S3	3	Normal movement, tonus and postural control and their differences after stroke Neurodevelopmental treatment	A1/A4	A1/A4	A1/A4	A1/A4	A1/A4		
	S4	4	NDT- clinical problem solving approaches and assessment methods with Bobath	A1/A4	A1/A4	A1/A4	A1/A4	A1/A4		
	S5	5	NDT-assessment applications with Bobath and case studies	A1/A4	A1/A4	A1/A4	A1/A4	A1/A4		
	S6	6	NDT- positioning, trunk and upper extremity treatment and mobilization methods with Bobath approach	A1/A4	A1/A4	A1/A4	A1/A4	A1/A4		
	S7	7	NDT- lower extremity treatment, balance and gait training with Bobath approach, case studies	A1/A4	A1/A4	A1/A4	A1/A4	A1/A4		
	S8	8	Midterm exam week	A1/A4	A1/A4	A1/A4	A1/A4	A1/A4		
	S9	9	Johnston, Brunnstrom approaches	A1/A4	A1/A4	A1/A4	A1/A4	A1/A4		
	S10	10	Johnston, Brunnstrom approaches	A1/A4	A1/A4	A1/A4	A1/A4	A1/A4		
	S11	11	Neuroplasticity	A1/A4	A1/A4	A1/A4	A1/A4	A1/A4		
	S12	12	Motor control and motor learning theory and principles	A1/A4	A1/A4	A1/A4	A1/A4	A1/A4		
	S13	13	To be able to draw and apply a rehabilitation program considering the pre and post functions and structures with	A1/A4	A1/A4	A1/A4	A1/A4	A1/A4		
	S14	14	Recognizing and managing muscle tone / spasticity	A1/A4	A1/A4	A1/A4	A1/A4	A1/A4		

	No	Type	Weight	Implementation Rule	Make-Up Rule
Assessment Methods, Weights in Grading Scheme, Implementation and Make-Up Rules	A1	Exam-Final Jury,Final Project	60%	One final exam is applied. Exam dates are announced by the faculty.	ABU's relevant regulation is applied.
	A2	Quiz			
	A3	Homework			
	A4	Midterm	40%	1 midterm exam (visa) is applied. Exam dates are announced by the faculty	ABU's relevant regulation is applied.
	A5	Project			
	A6	Presentation			
	A7	Attendance/Interaction			
	A8	Field Work			
	A9	Others			
		TOTAL	100%		

Evidence of Achievement of Learning Outcomes	At least one question from each subject is asked during the exams. A weighted average is calculated for each student based on the percentage of each assessment method. Students are required to collect a minimum score over 100, which is announced by the instructor, to pass the course. This score is determined based on class average.	
	Direct Conversion System ("DDS" in the regulation.) ☑	Relative Evaluation ("BDS" in the regulation.) ☐
	A different method/system, not listed above, determined by the Faculty Member / Instructor (This method is explained below)	☐

Method for Determining Letter Grade	Success Grade Range	Letter Success Note	Success Coefficient	Success Assessment
		A+	4,00	Successful
	95-100	A	4,00	Successful
	85-94	A-	3,70	Successful
	80-84	B+	3,30	Successful
	75-79	B	3,00	Successful
	65-74	B-	2,70	Successful
	60-64	C +	2,30	Successful
	55-59	C	2,00	Successful
	50-54	C-	1,70	Passes
	45-49	D+	1,30	Unsuccessful
	40-44	D	1,00	Unsuccessful
	0-39	F	0	Unsuccessful

	No	Method	Explanation	Total Hours
Teaching Methods, Student Work Load		**Time expected to be allocated by instructor**		
	1	Lecture	Lesson topics are explained by writing on the board or with a computer presentation. Sample questions are solved during the lesson.	28
	2	Interactive Lecture		
	3	Recitation		
	4	Laboratory		
	5	Practical	It includes lectures made by showing with applications.	28
	6	Field Work		
		Time expected to be allocated by student		
	7	Project		
	8	Homework		
	9	Pre-class Learning of Course Material	New topics are learned before being taught in the classroom.	25
	10	Review of Course Material	Topics are repeated to prepare for exams and assignments.	20
	11	Studio		
	12	Office Hour		
	Calculated ECTS Credit(s)	Max. 4	Min. 3	Grand Total	101

		IV. PART
Instructor	**Name Surname**	
	E-mail	
	Phone Number	
	Office Number	
	Office Hours	
Course Materials	**Mandatory**	
	Recommended	Meadows Linzi, Raine Sue, Lynch-Ellerington Mary, Karaduman Ayşe, Yıldırım Sibel Aksu, Yılmaz Öznur Tunca. Bobath kavramı : nörolojik rehabilitasyonda teori ve klinik uygulama. Ankara, Pelikan Kitapevi, 2012.
		Gjelsvik, Bente E. Bassbe. The Bobath concept in adult neurology. Stuttgart, New York : Thieme, c2008.
		Bobath, Berta. Adult hemiplegia, evaluation and treatment. Oxford : Butterworth Heinemann, 1991.
		Heinemann/Elsevier, 2007 5. Stokes, Maria. Physical management in neurological rehabilitation. . London : Mosby, 2005, c2004.
Other	**Scholastic Honesty**	Violations of scholastic honesty include, but are not limited to cheating, plagiarizing, fabricating information or citations, facilitating acts of dishonesty by others, having unauthorized possession of examinations, submitting work of another person or work previously used without informing the instructor, or tampering with the academic work of other students. Any for of scholastic dishonesty is a serious academic violation and will result in a disciplinary action. It is explained in Article 25 of the Directive on Associate and Undergraduate Programs of Antalya Bilim University.
	Students with Disabilities	Reasonable accommodations will be made for students with verifiable disabilities.
	Safety Issues	The course does not require any special security measures.
	Flexibility	Circumstances may arise during the course that prevents the instructor from fulfilling each and every component of this syllabus; therefore, the syllabus is subject to change. Students will be notified prior to any changes.