

Course Description					
Name	Code	Semester	T+A Hour	Credit	ECTS
COGNITIVE NEUROLOGY and IMAGING TECHNIQUES	DKTY1210445	Spring Semester	2+2	3	6
Prerequisites Courses					
Recommended Elective Courses					
Language of Instruction	Turkish				
Course Level	Second Cycle (Master's Degree)				
Course Type	Elective				
Course Coordinator	Assist.Prof. Talat BULUT				
Name of Lecturer(s)	Assist.Prof. Talat BULUT				
Assistant(s)					
Aim	This course aims to inform students of the Cognitive Neuroscience techniques and methods used in the intervention of speech and language disorders, and to provide students with knowledge and skills on the use of brain stimulation techniques in rehabilitation of speech and language disorders.				
Course Content	This course contains; Relationship between SLT and Cognitive Neuroscience,Overview of recording and stimulation techniques used in Cognitive Neuroscience,Speech and language impairments and fMRI,Speech and language impairments and EEG/ERPs,Transcranial magnetic stimulation, working principle and safety,Use of transcranial magnetic stimulation in rehabilitation of aphasia,Use of transcranial magnetic stimulation in fluency disorders,Use of transcranial magnetic stimulation in other SLT-related areas (dysphasia, dyslexia, autism, etc.),Transcranial direct current stimulation, working principle and safety,Use of transcranial direct current stimulation in rehabilitation of aphasia ,Use of transcranial direct current stimulation in fluency disorders ,Use of transcranial direct current stimulation in other SLT-related areas (dysphasia, dyslexia, autism, etc.) ,Student presentations,Student presentations.				
Course Learning Outcomes				Teaching Methods	Assessment Methods
Teaching Methods					
Assessment Methods					
Lecture Schedule					
Sequence	Topics	Preliminary Preparation			
1	Relationship between SLT and Cognitive Neuroscience	Reading the article on this week's topic that is uploaded into the system and doing the assignment given.			
2	Overview of recording and stimulation techniques used in Cognitive Neuroscience	Reading the article on this week's topic that is uploaded into the system and doing the assignment given.			
3	Speech and language impairments and fMRI	Reading the article on this week's topic that is uploaded into the system and doing the assignment given.			
4	Speech and language impairments and EEG/ERPs	Reading the article on this week's topic that is uploaded into the system and doing the assignment given.			
5	Transcranial magnetic stimulation, working principle and safety	Reading the article on this week's topic that is uploaded into the system and doing the assignment given.			
6	Use of transcranial magnetic stimulation in rehabilitation of aphasia	Reading the article on this week's topic that is uploaded into the system and doing the assignment given.			
7	Use of transcranial magnetic stimulation in fluency disorders	Reading the article on this week's topic that is uploaded into the system and doing the assignment given.			
8	Use of transcranial magnetic stimulation in other SLT-related areas (dysphasia, dyslexia, autism, etc.)	Reading the article on this week's topic that is uploaded into the system and doing the assignment given.			
9	Transcranial direct current stimulation, working principle and safety	Reading the article on this week's topic that is uploaded into the system and doing the assignment given.			
10	Use of transcranial direct current stimulation in rehabilitation of aphasia	Reading the article on this week's topic that is uploaded into the system and doing the assignment given.			
11	Use of transcranial direct current stimulation in fluency disorders	Reading the article on this week's topic that is uploaded into the system and doing the assignment given.			
12	Use of transcranial direct current stimulation in other SLT-related areas (dysphasia, dyslexia, autism, etc.)	Reading the article on this week's topic that is uploaded into the system and doing the assignment given.			
13	Student presentations				
14	Student presentations				
Evaluation Methods		Weight(%)			
Midterm Exam		50			
General Exam		50			

Resources
1- Stemmer, B., & Whitaker, H. A. (Eds.). (2008). Handbook of the neuroscience of language. Academic Press. 2- Gazzaniga, M., & Ivry, R. B. (2013). Cognitive Neuroscience: The Biology of the Mind: Fourth International Student Edition. WW Norton. 2- Ward, J. (2015). The student's guide to cognitive neuroscience. Psychology Press.