

Course Name: Advances in Neuroscience		Course Level: Undergraduate			Language: English
Course Code	Prerequisites	Corequisites	(T + P hours)	ECTS Credit	Type
PSYC4805	-	-	3+0	5	Selective

Course objectives: Introduce the students to recent topics in neuroscience related with cognitive research, neuropsychiatric diseases and imaging methods.

Course description: Introduce the students to recent topics in neuroscience related with cognitive research, neuropsychiatric diseases and imaging methods. Presentation and discussion of most recent research on various neuropsychiatric conditions such as ADHD, OCD, Schizophrenia, Dementia, Autism, Bipolar disorder, personality disorders, etc. Common imaging methods such as EEG and MRI.

Evaluation system (in percentages):

Homework	Presentation	Total
%40	%60	100

References

Purves, D., Augustine, G. J., Fitzpatrick, D., Hall, W. C., LaMantia, A.-S., McNamara, J. O., & Williams, S. M. (Eds.). (2012). Neuroscience (5rd ed.). Sinauer Associates.

Weekly Course Topics

Week	Topic
1.	Course introduction - What is neuroscience?
2.	Brain anatomy
3.	Common neuroimaging methods
4.	Scientific research and writing

5.	Group discussion on selected research
6.	Group discussion on selected research
7.	Presentation on selected research
8.	How to write homework?
9.	Student presentations
10.	Student presentations
11.	Student presentations
12.	Student presentations
13.	Student presentations
14.	Student presentations

Contribution of the Course to the Program Outcomes

Course Outcomes

Students will gain the following knowledge and skills at the end of the course:

1. Establish the relations between neuropsychiatric diseases and the cognitive processes.
2. Compare various new techniques and imaging methods.
3. Analytically discuss neuropsychiatric diseases with respect to the nervous system.
4. Understand the recent findings on the brain, nervous system and cognitive research.

	Program Outcomes	CO1	CO2	CO3	CO4
1.	To examine and compare different concepts in subfields of psychology and to have basic application skills.				
2.	To apply analytical and critical thinking skills in various fields of psychology, to be able to solve the problems related to the field with contemporary methods.	X	X	X	
3.	The student has the skills to interpret facts, events and data, to define and analyze problems, to develop solutions based on research and evidence by using the knowledge and skills they have acquired in the field.				

4.	Discussing and criticizing professional and ethical issues in program design and professional practice.				
5.	To explain the procedures and rules in psychological measurement and interview techniques, and to develop the ability to apply them at a basic level.				
6.	Adopting the rules of the positivist method and designing scientific research, collecting data, analyzing data and scientifically reporting the results.				
7.	To gain the basic principles of scientific thinking, to be able to separate and / or integrate the knowledge gained by other disciplines with a critical point of view.			X	X
8.	To develop the competence for using the necessary information and communication technologies used to reach and spread information.				
9.	To use oral and written communication skills effectively both in Turkish and at least one foreign language.				
10.	Working effectively in individual and multidisciplinary research teams.				
11.	To develop respect for interpersonal and cultural diversity and to have social responsibility.				
12.	To be aware of psychological resilience, personal and professional development.		X		

Course Evaluation and ECTS Workload			
Types of Work	Number	ECTS Workload	
		Time	Work Load
Attendance	14	3	42
Final exam	0	0	0

Quizzes	0	0	0
Semester project	0	0	0
Assignments	0	0	0
Final project	0	0	0
Seminar	0	0	0
Duties	1	30	30
Presentation	1	40	40
Midterm	0	0	0
Project	0	0	0
Lab	0	0	0
Private lesson time	0	0	0
Other (Personal study)	14	1	14
		Total workload	128
		Total workload/25	5.12
		ECTS Credit	5

Teaching Methods and Techniques: Lecture, Presentation, Discussion, Q&A.

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Date: 05.09.20