

Cognitive Neuroscience

PSY452/552 Course Syllabus Fall 2020

When / Where

Mondays 11:40-12:30 & Wednesdays 10:40-12:30

Instructor

Eren Günseli, Ph.D. <eren.gunseli@sabanciuniv.edu>
Office hours: TBA

TA

TBA

Prerequisites

See the website

Description

Cognitive neuroscience is a branch of neuroscience that studies processes of the nervous system underpinning cognitive functions (acquisition, storage, transformation, and use of knowledge). The course explores the neural mechanisms underlying cognitive processes such as perception, attention, memory, and decision-making. In light of behavioral and neuroimaging research, the course aims to deliver the skills to interpret cognitive neuroscience research and understand human cognition.

Course website

Please regularly check the course website because the syllabus is subject to change depending on your progress. The latest updates will be posted on the website.

Materials

Textbook: Chapters will be provided online! Different weeks' chapters will be from different textbooks.

Slides: Lecture slides for each class will be made available on the course website before or soon after that lecture.

Slides themselves will not include sufficient amount of text to understand the lecture contents. Therefore, I highly recommend attending the classes.

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Course schedule

Note that the schedule below is tentative; depending on the questions asked during classes and the subjective difficulty of the topics for students we may cover less or more topics than shown here. Please check the course website for the latest updates on the syllabus.

Dates	Topic	Readings
Oct 5 & 7	Why and how do we study the brain?	Gazzinga et al. book Chapters 3
Oct 12, 14, & 19	How is the human nervous system organized, and how does it work?	Gazzinga et al. book Chapters 2
Oct 21, 26, & Nov 2	How do we see?	Gazzinga et al. book chapters 4 (parts uploaded for week 2) & 5 (full)
Nov 4	Midterm exam 1	All chapters until now
Nov 9, 11, 16	How do we pay attention?	Gazzinga et al. Ch 7
Nov 18,23,25,30	How do we remember information?	Passer & Smith Ch 8
Dec 2	Why do we sleep?	Passer & Smith Ch 6
Dec 7	From sounds to complex ideas: Language in the brain	Banich & Compton Ch4
Dec 9	Midterm exam 2	Chapters after the first midterm
Dec 14 & 16	How do we make decisions?	TBA
Dec 21 & 23	Why are some things rewarding?	TBA
Dec 28	How does the brain create emotions?	Passer & Smith Ch 11
Dec 30	How do we interact with other people?	Passer & Smith Ch 17
Jan 4	What are the effects of an abnormal brain?	Passer & Smith Ch 15&16
Jan 6	Review <i>and/or</i> catching up	-
TBA	Final Exam	Everything

Grading

Assignment	Date	% of final grade
Midterm exam #1	Nov 4	25%
Midterm exam #2	Dec 9	25%
Quizzes & class participation	weekly	25%
Final exam	TBA	25%
Extra credit	Throughout the term	Up to 3 points

A	A-	B+	B-	C+	C-	D+	D-	F
>90	85-89.99	80-84.99	75-79.99	70-74.99	65-69.99	60-64.99	55-59.99	<55

Exams:

Exams will have multiple choice, fill-in, and short answer questions. While most questions test your general knowledge, some question will aim to test your understanding and critical thinking. Thus, you should try to challenge the studies you read about, connect what you learned across different chapters, and form a big picture.

Make-up exams will be allowed only when a written justification (e.g., a doctor's report) is provided. Make-up exams must be taken within one week after the exam.

Take-home quizzes:

I will give quiz questions on SUCourse You can check the slides and listen to the lecture videos to answer these questions. You need to submit your answer before the next class (until 11:40 am each Monday). Please do them on your own to improve your learning maximally.

Extra credit:

Through participating in psychology experiments (online), you can receive extra points on top of your final grade, with a maximum of 3 points. I recommend you to volunteer in experiment participation not only (i) to receive extra course credits, but also to (ii) contribute to the scientific advancement performed at Sabancı University, and (iii) experience how psychology and cognitive neuroscience experiments are performed.

For this course, you will be able to earn up to 3 bonus points (1 research point equals ~ 30 minutes of research participation). Six research points (6PRs) will be converted to 3 bonus points added to your overall total at the end of the semester. More information on the available research projects will be provided during the semester. You will be able to sign up for the experiments and get your research participation points through the online Sona system at <http://sabanciuniv.sona-systems.com>. Please, carefully read the Guide for Students: Sabancı University Experiment Credits System (Sona). Note that this option is subject to availability: There may be not enough experiments available to complete 3 bonus points.

Quizzes:

There will be weekly quizzes to ensure consistent learning.

Attendance:

I recommend attending classes and if possible participate during the classes. If you don't understand something, please ask. If you don't agree with something, please raise your concern. Participation will enhance the learning of the whole classroom, will make the classes more fun for you, and also will make teaching more fun for me (instructors are also human 😊). Also, together with quizzes, attendance will make up 10% of your grade.

Plagiarism (Extremely critical. Make sure you read this part):

If you use someone else's thoughts or sentences without mentioning that these thoughts and sentences are theirs, then you are conducting plagiarism. Do not use someone else's idea as if it is yours. That means, no copy pasting, no stealing of ideas without acknowledging that they are someone else's. For more information in plagiarism, check out this [link](#). If you plagiarize you can get zero points for your quizzes or take-home exams. Please, never plagiarize!