

Subject Details	Subject Title, code and credit hours	PSYC 417, Nervous System: Higher Nervous Activity and Somatosensory System, 6 ECTS	
	Department	Psychology	
	Program (bachelor's and master's degree)	Bachelor's degree	
	Associated Term	Fall semester, 2024	
	Instructor	Zeynalova Aygun	
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	Phone	+994 55 268 29 30	
	Lecture room/Schedule	Nefchilar campus	
	Consultations	After the classes- 30 minute	
Teaching language	English		
Subject type (mandatory/elective)	Mandatory		
Readings	<p>Change Your Brain, Change Your Life (Revised and Expanded): The Breakthrough Program for Conquering Anxiety, Depression, Obsessiveness, Lack of Focus, Anger, and Memory Problems Paperback – November 3, 2015 By Daniel G. Amen M.D</p> <p>Textbook of Medical Physiology – Twelfth Edition by Guyton and Hall</p>		
Teaching methods	Lecture		+
	Group discussions		+
	Activities		+
	Analysis of activities		+
	Other		+
Assessment and Grading	Components	Deadlines	Percentage (%)
	Attendance	During semester	5
	Participation	During semester	5
	Quiz I	Until midterm exam	5
	Midterm Exam	Week 8	30
	Presentation/Group discussion	During semester	10
	Quiz II	Until final exam	5
Course outline	<p>This course provides a comprehensive exploration of the higher nervous system and somatosensory system, delving into the complex mechanisms underlying cognition, emotion, and sensation. Students will gain a deep understanding of the brain's role in processing information, controlling movement, and regulating physiological functions.</p>		
Course objectives	<p>By the end of this course, students will be able to:</p> <ul style="list-style-type: none"> • Explain the key structures and functions of the higher nervous system and somatosensory system. • Describe the neural mechanisms underlying various cognitive, emotional, and sensory processes. • Analyze the role of the brain in regulating behavior and physiological functions. • Apply their knowledge to understand and interpret research findings in neuroscience. • Critically evaluate different theoretical perspectives on higher nervous activity and the somatosensory system. 		

Learning Outcomes	<p>Students will:</p> <ul style="list-style-type: none"> • Understand brain structures and functions. • Describe neural mechanisms. • Analyze research findings. • Evaluate theoretical perspectives. • Apply knowledge to real-world phenomena. • Communicate effectively on neuroscience topics. • Recognize the importance of neuroscience research. • Demonstrate ethical considerations in neuroscience.
Marking Criteria	<p>Attendance</p> <ul style="list-style-type: none"> • Regular Attendance: Attends class sessions consistently, with minimal absences. • Punctuality: Arrives on time for class sessions. <p>Participation</p> <ul style="list-style-type: none"> • Active Engagement: Regularly contributes to class discussions and activities. • Quality of Contributions: Offers thoughtful and insightful comments that demonstrate understanding of the material. • Respectful Dialogue: Listens attentively to others and engages in respectful and constructive dialogue. <p>Quiz I</p> <ul style="list-style-type: none"> • Knowledge and Understanding: Demonstrates a clear understanding of the key concepts, and theories covered in the first half of the semester. • Application: Can effectively apply theoretical knowledge to real-world scenarios and case studies related to the covered material. • Accuracy: Answers questions accurately and comprehensively. <p>Midterm Exam</p> <ul style="list-style-type: none"> • Knowledge and Understanding: Demonstrates a clear understanding of key concepts and theories related to Nervous System: Higher Nervous Activity and Somatosensory System. • Critical Thinking: Applies critical thinking skills to analyze and evaluate information, drawing logical conclusions and making well-supported arguments. • Clarity and Organization: States ideas clearly and logically, using appropriate language and structure. <p>Quiz II</p> <ul style="list-style-type: none"> • Knowledge and Understanding: Demonstrates a clear understanding of the key concepts and theories covered in the second half of the semester. • Application: Can effectively apply theoretical knowledge to real-world scenarios and case studies related to the remaining material. • Accuracy: Answers questions accurately and comprehensively.

	<p>Final Exam</p> <ul style="list-style-type: none"> • Comprehensive Understanding: Demonstrates a comprehensive understanding of the course material, including key concepts and theories. • Critical Thinking and Application: Applies critical thinking skills to analyze and evaluate information, and effectively applies theoretical knowledge to real-world scenarios. • Problem-Solving: Can solve problems related to psychopathology, demonstrating a deep understanding of the subject matter. • Clarity and Organization: States ideas clearly and logically, using appropriate language and structure. 	
Rules (educational policy and behavior)	<p>We want to build a classroom climate that is safe for all. It is important that we</p> <ul style="list-style-type: none"> • display respect for all members of the classroom – including the instructor and students; • pay attention to and participate in all class sessions and activities; • avoid unnecessary disruption during class time (e.g. having private conversations, reading the newspaper, surfing the Internet, doing work for other classes, making/receiving phone calls, text messaging, etc.); • avoid racist, sexist, homophobic, or other negative language that may unnecessarily exclude members of our campus and classroom. This is not an exhaustive list of behaviors; rather, it represents examples of the types of things that can have a dramatic impact on the class environment. 	
Week	Topics	Reference
1.	Introduction to Nervous System: Higher Nervous Activity and Somatosensory System	
2.	Organization of the Nervous System, Basic Functions of Synapses, and Neurotransmitters	Textbook of Medical Physiology - Chapter 45, pp. 543-557
3.	Sensory Receptors, Neuronal Circuits for Processing Information	Textbook of Medical Physiology - Chapter 46, pp. 559-569
4.	Somatic Sensations: I. General Organization, the Tactile and Position Senses	Textbook of Medical Physiology - Chapter 47, pp. 571-581
5.	Somatic Sensations: II. Pain, Headache and Thermal Sensations	Textbook of Medical Physiology - Chapter 48, pp. 583-592
6.	Quiz I	
7.	States of Brain Activity—Sleep, Brain Waves, Epilepsy, Psychoses	Textbook of Medical Physiology - Chapter 59, pp. 721-727
8.	Midterm Exam	
9.	Higher Nervous Activity – Conditioned and Unconditioned Reflexes	Textbook of Medical Physiology - Chapter 60, pp. 836-849
10.	Limbic System Prescriptions	Change Your Brain, Change Your Life - pp. 105-132
11.	Basal Ganglia Prescription	Change Your Brain, Change Your Life - pp. 148-169
12.	Presentation/Group discussion	
13.	Prefrontal Cortex Prescriptions	Change Your Brain, Change Your Life - pp. 188-205
14.	Quiz II	

15.	Temporal Love Prescription	Change Your Brain, Change Your Life - pp. 245-263
16.	Final Exam	