

Identification	Subject	Sensation and Perception, PSYC337, 3KU (6AKTS)
	Department	Psychology
	Program (Undergraduate, Graduate)	Undergraduate
	Term	Fall, 2026-2027
	Instructor	Aytaj Nuruzada
	Email:	aytaj.nuruzada@gmail.com aytaj.nuruzada@khazar.org
	Classroom/hours	Monday and Tuesday 15:50 Narimanov Campus
Prerequisites	-	
Language	English	
Compulsory/Elective	Mandatory	
Textbooks and course materials	1. Goldstein, E. B., & Cacciamani, L. (2022). Sensation and perception (11th ed.). Cengage. 2. Kranowitz, C. S. (2022). The out-of-sync child: Recognizing and coping with sensory processing differences (3rd ed.). TarcherPerigee. 3. Wolfe, J. M., Kluender, K. R., Levi, D. M., Bartoshuk, L. M., Herz, R. S., Klatzky, R. L., & Merfeld, D. M. (2020). Sensation & perception (6th ed.). Oxford University Press.	
Course description	Our interactions with the environment are initially possible due to sensation and perception. This course provides an introduction to the psychological and physiological processes underlying sensation and perception. How we sense and perceive the world is a complex process that involves our senses and our brain. Students will examine how sensory systems receive, transform, and organize information from the environment and how the brain interprets this information to create meaningful perceptual experiences. The course begins with the principles of sensation, perception, and psychophysics, including methods used to measure sensory experiences. Students then explore the major sensory systems, with particular emphasis on vision. Students will also examine auditory perception, including the physical and perceptual properties of sound, environmental hearing, music perception, speech perception, and the neural mechanisms underlying speech processing. The course further explores vestibular sensation and the somatosensory system, including touch, vibration, texture, and social touch. The chemical senses are examined through the study of olfaction and gustation. Throughout the course, students will consider perceptual illusions, sensory processing differences, and individual variations in sensory experience. Major theories of perception will be critically examined to understand how the brain constructs interpretations of the external world. By the end of the course, students will have developed an integrated understanding of the relationship between sensory processing, attention, brain function, and perceptual experience, as well as the role of sensation and perception in everyday behavior and psychological functioning.	
Course objectives	• Examine how sensory information is detected, encoded, organized, and interpreted by the nervous system. • Introduce students to psychophysical methods and the principles used to measure and study sensory experiences. • Explore the cognitive processes involved in perception, including attention, object and scene recognition, depth perception, motion perception, and perceptual organization. • Develop students' ability to understand and critically evaluate perceptual phenomena, including illusions, sensory processing differences, spatial neglect, and extinction. • Explore contemporary theories of perception and the role of experience, context, attention, and prior knowledge in constructing perceptual experiences	

	• Connect research in sensation and perception to everyday experiences and applications in psychology. • Develop students' skills in interpreting empirical findings and applying scientific principles to questions concerning sensory and perceptual processes.		
Learning Outcomes	• Define and distinguish the key concepts in sensation and perception, such as absolute threshold, difference threshold, sensory adaptation, top-down and bottom-up processing, and perceptual illusions. • Describe the structure and function of the major sensory systems (e.g., visual, auditory, tactile, gustatory, and olfactory systems) and their role in processing environmental stimuli. • Explain the basic processes involved in visual perception, including pattern recognition, color perception, object and scene perception, motion, depth, and size perception. • Explain how auditory information is processed and apply principles of hearing to the perception of environmental sounds, music, and speech. • Describe the mechanisms underlying touch, vibration, texture, social touch, balance, smell, and taste, and explain how these sensory experiences contribute to perception. • Recognize and discuss individual differences and atypical patterns of sensory processing and their potential implications for behavior and psychological functioning. • Apply principles of sensation and perception to everyday situations and psychological phenomena.		
Teaching methods	Case analysis		+
	Group discussion		+
	Lecture		+
	Activities		+
Evaluation Criteria	Methods	Date/deadlines	Percentage (%)
	Midterm Exam	8th week	30
	Quizzes	November	5
	Activity		5
	Individual Presentation		5
	Attendance		5
	Group Presentation	December	10
	Final Exam	January	40
	Total		100
Class Policy	Marking Criteria Activity - Contributing to class discussions, sharing insights, and integrating comments during lecture time. Actively participating in group work and discussions. Engage in activities. Compete in online quizzes. Individual Presentation – Each student will give a brief presentation on a topic from the course syllabus individually. It should cover the literature. Students will be chosen each week by the instructor. Group Presentation – Working on a creative project chosen by the students and presenting the project in class. The project and presentation should be more than a summary of the literature. Projects can be demonstrations, engaging activities in class, experiments in class, or research. Group members will receive the same grade for their collaborative work and an additional individual grade for their part in the project. Attendance. It is important for students to attend all classes. If a student is unable to attend classes for a valid reason (illness, family status, etc.), they must report the matter to the faculty dean. It is expected that students will attend the class prepared and actively participate in class discussions.		

	Laptops, Cell Phones, and Other Devices. Please make sure that your cell phone and other devices are set to silent or vibration during the class period. Activities using cell phones and other devices, such as text messaging, taking pictures, and using social media, are not permitted in the classroom. Active use of electronic devices during discussions creates a distraction for me and others. Respect and Courtesy. Unethical discussion and behavior of students in the classroom is strictly prohibited. Any disrespectful comments or behaviors are not permitted in this class. Academic Ethics. Cheating or any other academic dishonesty, including plagiarism, will result in a serious consequence, including, but not limited to, getting zero (0) points on the given quiz, exam, or paper. The results of students who engage in academic dishonesty will be canceled. Use of AI: AI tools (e.g., ChatGPT) are permitted in this course for brainstorming and checking grammar and style. Your use of AI tools must be properly documented. AI tools are not permitted in this course for completing the assignments, writing entire sentences and paragraphs, and competing in online quizzes. Any assignment that is found to have used generative AI tools in unauthorized ways will result in zero (0) points on the given assignment.
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Tentative Schedule

Week	Date/Day (tentative)	Topics	Textbook/Assignments
1	15.09.2026 21.09.2026	Introduction to Sensation and Perception. Psychophysics and methods of measurement.	Wolfe et al., Ch. 1, pp. 3-30.
2	22.09.2026 28.09.2026	The Visual System. Physiology of the Eye.	Wolfe et al., Ch. 2, pp. 33-50. Goldstein & Cacciamani, Ch. 3, pp. 40-60.
3	29.09.2026 05.10.2026	Basic Visual Processes. Pattern and Color Vision. Perceiving color.	Wolfe et al., Ch. 5, pp. 131-150.
4	06.10.2026 12.10.2026	Perceiving objects and scenes. The problems of perceiving and recognizing objects.	Goldstein & Cacciamani, Ch. 5, pp. 89-114.
5	13.10.2026 19.10.2026	Visual Attention. Benefits of Attention. Physiology of Attention. Spatial Neglect and Extinction.	Goldstein & Cacciamani, Ch. 6, pp. 123-144.
6	20.10.2026 26.10.2026	Perceiving motion, depth, and size. Illusions of depth and size.	Wolfe et al., Ch. 8, pp. 249-270. Goldstein & Cacciamani, Ch. 10, pp. 229-255.
7	27.10.2026 02.11.2026	Hearing. Physical and perceptual aspects of sound. Hearing the environment.	Wolfe et al., Ch. 9, pp. 273-300.
8		Midterm exam	
9	03.11.2026 10.11.2026	Perceiving Music. Perceiving Speech. Speech Perception and the Brain. Vestibular Sensation.	Goldstein & Cacciamani, Ch. 13, pp. 311-330; Ch. 14, pp. 342-352. Kandel et al., Ch. 4, pp. 629-650.
10	16.11.2026 17.11.2026	Touch. Perceiving Vibration and Texture. Social Touch.	Goldstein & Cacciamani, Ch. 15, pp. 358-384.
11	23.11.2026 24.11.2026	Olfaction. From Chemicals to Smell. Representing Odors in Cortex.	Goldstein & Cacciamani, Ch. 16, pp. 390-407.
12	30.11.2026 01.12.2026	Taste. Anatomy and Physiology of Gustatory System. The perception of Flavor.	Wolfe et al., Ch. 15, pp. 495-520. Goldstein & Cacciamani, Ch. 16, pp. 408-414.

13	07.12.2026 14.12.2026	Issues with Sensory Processing. Recognizing Sensory Processing Differences. Theories on Perception.	Kranowitz, Ch. 4, pp. 86-120.
14	15.12.2026 21.12.2026	Project Presentations.	
15	22.12.2026 28.12.2026	Project Presentations.	
16		Final exam	