

<b>Subject details</b>	<b>Subject Title, code and credit hours</b>	PSYC400, Mind, brain, behaviour, 3 KU / 6 ECTS
	<b>Department</b>	Psychology
	<b>Program (bachelor's and master's degree)</b>	Bachelor's
	<b>Associated Term</b>	Spring 2026
	<b>Instructor</b>	Zeynalova Aygun
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	<b>Phone</b>	
	<b>Lecture room/Schedule</b>	
	<b>Consultations</b>	After classes- 30 minute
<b>Teaching language</b>	English	
<b>Subject type (mandatory/elective)</b>	Mandatory	
<b>Readings</b>	<ol style="list-style-type: none"> <li>1. Cognitive Psychology and Cognitive Neuroscience. German Wikibooks 2013</li> <li>2. You, Happier: The 7 Neuroscience Secrets of Feeling Good Based on Your Brain Type Hardcover – March 22, 2022 by Daniel G. Amen, MD (Author)</li> <li>3. Foundations of neuroscience Casey Henley. Michigan State University libraries 2024</li> <li>4. Guyton and Hall, Textbook of Medical Physiology, 2025</li> </ol>	
<b>Course Description</b>	<p>This course provides an advanced exploration of the relationships between the mind, brain, and behavior. Students will examine how neural structures and processes give rise to cognitive functions, emotions, and complex behaviors. The course integrates findings from neuroscience, cognitive psychology, and behavioral research to understand both typical and atypical human functioning. Key topics include brain anatomy and physiology, neural communication, perception, attention, learning, memory, emotion, decision-making, and the neural bases of mental disorders. Through lectures, discussions, and practical exercises, students will develop critical thinking skills and the ability to apply scientific principles to understand human behavior.</p>	
<b>Course objectives</b>	<p>This course aims to provide students with a strong foundation in the field of Cognitive Neuroscience, a field that studies the intricate links between the mind, the brain, and behavior. You will first learn basics about brain anatomy and function, and about the methods used to study how the brain supports cognition and behavior. Then, we will explore the various functions of the brain by taking a journey from lower- to higher-level cognitive processes: we will study how we can sense and perceive the world, act in it, learn and think about it, and remember it.</p> <ul style="list-style-type: none"> <li>➤ To provide students with a foundational understanding of the biological and psychological bases of behaviour.</li> <li>➤ To explain how brain structure and neural processes influence cognition, emotion, and action.</li> <li>➤ To introduce key concepts and methods in neuroscience, psychology, and cognitive science.</li> </ul>	

	<ul style="list-style-type: none"> <li>➤ To develop students' ability to analyze and interpret scientific research related to mind and behaviour.</li> <li>➤ To examine the interaction between biological, environmental, and social factors in shaping behaviour.</li> <li>➤ To encourage critical thinking about contemporary issues in brain and behavioural sciences.</li> <li>➤ To familiarize students with ethical considerations in brain research and mental health.</li> <li>➤ To prepare students for advanced study in psychology, neuroscience, and related disciplines.</li> </ul>		
<b>Learning Outcomes</b>	<ul style="list-style-type: none"> <li>• Explain the relationship between brain structure, neural function, and behaviour.</li> <li>• Describe key theories and concepts in psychology, neuroscience, and cognitive science.</li> <li>• Apply scientific methods to study mental processes and behaviour.</li> <li>• Analyze and interpret basic research findings related to brain and behaviour.</li> <li>• Evaluate the influence of biological, environmental, and social factors on behaviour.</li> <li>• Demonstrate critical thinking in discussing contemporary issues in brain and behavioural sciences.</li> <li>• Identify ethical issues associated with brain research and mental health.</li> <li>• Communicate scientific ideas effectively using appropriate terminology.</li> </ul>		
<b>Teaching methods</b>	<b>Lecture</b>		+
	<b>Group discussions</b>		+
	<b>Activities</b>		+
	<b>Analysis of activities</b>		+
	<b>Other</b>		+
<b>Assessment and Grading</b>	<b>Components</b>	<b>Deadlines</b>	<b>Percentage (%)</b>
	Midterm exam	8 Week	30
	Essay	During Semester	10
	Being active member of learning community	During Semester	10
	Attendance	During Semester	10
	Final exam	End of the semester	40
<b>Rules (educational policy and behavior)</b>	<p>Questions emphasize understanding and critical thinking. You should make sure to know key concepts and definitions, of course, but use those to scaffold a more comprehensive understanding of the material. For example, when you read about a study, make sure you understand why and how something happens, not just what happens.</p> <p>Attendance</p> <ul style="list-style-type: none"> <li>• Consistent Attendance: Regular participation in classes with minimal absences.</li> <li>• Punctuality: Arriving at classes on time.</li> </ul> <p>Participation</p>		

	<ul style="list-style-type: none"> <li>• <b>Active Participation:</b> Regularly engaging actively in class discussions and activities.</li> <li>• <b>Quality of Engagement:</b> Providing thoughtful, in-depth comments that demonstrate comprehension of the material and listening attentively to others.</li> </ul> <p>Test I</p> <ul style="list-style-type: none"> <li>• Demonstrate clear understanding of the key concepts and theories covered in the first half of the semester.</li> <li>• Effectively apply theoretical knowledge to real-life scenarios.</li> <li>• Provide precise and comprehensive responses to questions.</li> </ul> <p>Midterm Exam</p> <ul style="list-style-type: none"> <li>• Demonstrate clear understanding of the key concepts and theories related to Perception, Brain, and Behavior.</li> <li>• Apply critical thinking skills to analyze and evaluate information, draw logical conclusions, and advance substantiated arguments.</li> <li>• Express ideas clearly and logically using appropriate language and structure.</li> </ul> <p>Test II</p> <ul style="list-style-type: none"> <li>• Demonstrate clear understanding of the key concepts and theories covered in the first half of the semester.</li> <li>• Effectively apply theoretical knowledge to real-life scenarios.</li> <li>• Provide precise and comprehensive responses to questions.</li> </ul> <p>Final Exam</p> <ul style="list-style-type: none"> <li>• Demonstrate comprehensive understanding of the course material, including key concepts and theories.</li> <li>• Apply critical thinking skills to analyze and evaluate information and effectively apply theoretical knowledge to real-life scenarios.</li> <li>• Express ideas clearly and logically using appropriate language and structure.</li> </ul> <p>We want to build a classroom climate that is safe for all. It is important that we</p> <ol style="list-style-type: none"> <li>1) display respect for all members of the classroom – including the instructor and students;</li> <li>2) pay attention to and participate in all class sessions and activities;</li> <li>3) 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.); and</li> <li>4) 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.</li> </ol>
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Week	Topics	Reference
<b>1.</b>	Introduction to the Topic	Cognitive Psychology and Cognitive Neuroscience. German Wikibooks 2013, Chapter 1
<b>2.</b>	Perception and living	Cognitive Psychology and Cognitive Neuroscience. German Wikibooks 2013, Chapter 2

3.	Brain Anatomy and Neuronal Functions	Foundations of neuroscience Casey Henley.Michigan State University libraries 2024 Part 3 169-193
4.	Cognitive Neuropsychology: Perception, Attention, and Recognition	Cognitive Psychology and Cognitive Neuroscience. German Wikibooks 2013, Chapter 1
5.	Cognitive Neuropsychology: Learning and Memory	Guyton and hall textbook of medical physiology chapter 57 pages 697
6.	Cerebral Cortex and Behavior	Guyton and hall textbook of medical physiology chapter 55 pages 590
7.	Sensory systems:touch	Foundations of neuroscience Casey Henley.Michigan State University libraries 2024 Part 4 pages 245-272
8.	<b>Midterm exam</b>	
9.	Neuronal Visualization and Neurostimulation	Cognitive Psychology and Cognitive Neuroscience. German Wikibooks 2013, Chapter 2
10.	Study of fear	Foundations of neuroscience Casey Henley.Michigan State University libraries 2024 Part 6 pages 389
11.	Our Instincts	Foundations of neuroscience Casey Henley.Michigan State University libraries 2024 Part 5 pages 321
12.	Effects of Neurochemical Processes in the Brain on Our Mood	Guyton and hall textbook of medical physiology chapter 60 pages 721
13.	Quiz	
14.	Emotion and Its Neuropsychology	Foundations of neuroscience Casey Henley.Michigan State University libraries 2024 Part 8 pages 455
15.	Hormone control: gender differentiation	Foundations of neuroscience Casey Henley.Michigan State University libraries 2024 Part 6 pages 367-379
16.	<b>Final exam</b>	