

SYLLABUS

Cognitive psychology

University year 2025-2026

1. Information about the study program

1.1 Higher education institution	Babeş-Bolyai University
1.2 Faculty	Faculty of Psychology and Educational Sciences
1.3 Department	Department of Psychology
1.4 Field of study	Psychology - Cognitive Sciences
1.5 Study cycle	Undergraduate
1.6 Study program / Qualification	Psychologist
1.7 Form of education	Full time

2. Information about the course

2.1 Title of the course	Cognitive psychology	Discipline code	PLE 1207				
2.2 Teacher in charge of the lecture	Lect. Dr. Renata Heilman						
2.3 Teacher in charge of the seminar	Asist. Dr. Andrei Costea						
2.4 Study year	1	2.5 Semester	2	2.6. Examination type	E	2.7 Discipline regime	DS

3. Estimated total time (number of hours of teaching activities per semester)

3.1 Number of hours per week	4	out of which: 3.2 lecture	2	3.3 seminar / practical laboratory	2
3.4 Total number of hours in the curriculum	56	out of which: 3.5 lecture	28	3.6 seminar / practical laboratory	28
Distribution of the allocated amount of time:					hours
Individual study (textbook, course support, bibliography, and notes)					21
Supplementary documentation at the library using specialized electronic platforms in the field					10
Preparing for seminars / laboratories, homework, papers, portfolios, and essays					15
Tutoring					4
Exams					2
Other activities: research activities					1

3.7 Total number of hours for individual study	48
3.8 Total number of hours per semester	125
3.9 Number of credits (ECTS)	5

4. Prerequisites (if applicable)

4.1 Curriculum	<ul style="list-style-type: none"> • Introduction to psychology • Experimental psychology
4.2 Competencies	-

5. Requirements (if applicable)

5.1 For the lecture	<ul style="list-style-type: none"> • Classroom with at least 180 seats, computer and video projector / Online course conducted through the MS Teams platform.
5.2 For the seminar / laboratory	<ul style="list-style-type: none"> • Room with at least 50 seats, computer and video projector / Online seminar conducted through the MS Teams platform.

6. Specific skills acquired

Professional skills	<p>Knowledge and understanding</p> <ul style="list-style-type: none"> • Understanding the place and role of cognitive psychology within cognitive sciences • Knowledge of fundamental aspects and the role of cognitive approach in psychology • Characterization of the main study paradigms of cognitive psychology • Understanding the cognitive perspective on various mental processes and phenomena • Familiarization with the principles of fundamental research in cognitive psychology <p>Explanation and interpretation</p> <ul style="list-style-type: none"> • Arguing the importance of the cognitive approach in psychology • Interpretation from a cognitive perspective of different psychic phenomena and processes • Carrying out comparative analyses based on the main study paradigms of cognitive psychology • Explaining and arguing the experimental approach of some psychic phenomena and processes
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	<p>Instrumental - applicative</p> <ul style="list-style-type: none"> • Learning the main techniques for investigating psychological processes in the cognitive paradigm • Developing skills to conduct a research project <p>Attitude</p> <ul style="list-style-type: none"> • Manifestation of a positive and responsible attitude towards the scientific field • Cultivating a responsible attitude towards the research activity in the field • Interest in personal development in the field
Transversal skills	<ul style="list-style-type: none"> • Written and oral communication skills • Relationship and teamwork skills • Time management skills and the management of resources • Competences for the interdisciplinary use of knowledge and terminology in the fields of psychology and cognitive sciences

7. Objectives of the course (based on the grid of acquired competencies)

7.1 General objective	Familiarizing students with cognitive psychology and the cognitive approach of the human mental system.
7.2 Specific objectives	<ul style="list-style-type: none"> • Presentation of the cognitive approach and its impact in psychology • Analysis of the place and role of cognitive psychology in the cognitive sciences • Discussion of the main research paradigms of cognitive psychology • Cognitive approach to the human mental system (visual information processing, attention, categorization, mental imaging, memory, knowledge representation, language, decision making, problem solving and reasoning).

8. Content

8.1 Lecture	Teaching strategies	Remarks
<p>Psychology and cognitive sciences</p> <p>Keywords: cognitive sciences, cognitive psychology</p>	lecture, demonstration, synthesis, guided discovery	
<p>Visual information processing: primary processing</p> <p>Keywords: primary processing, primitive sketch, bottom-up analysis</p>	lecture, demonstration, synthesis, guided discovery	
<p>Visual information processing: secondary processing</p>	lecture, demonstration, synthesis, guided discovery	

Keywords: secondary processing, recognition, top-down analysis		
Attention and attention models Keywords: attention, early selection, late selection, attenuated filters	lecture, demonstration, synthesis, guided discovery	
Memory systems: memory structures Keywords: memory systems, sensory memory, short-term memory, long-term memory	lecture, demonstration, synthesis, guided discovery	
Memory systems: memory processes Keywords: encoding, consolidation, retrieval, forgetting	lecture, demonstration, synthesis, guided discovery	
Cognitive unconscious Keywords: unconscious, implicit perception, implicit memory, implicit learning	lecture, demonstration, synthesis, guided discovery	
Mental imagery Keywords: mental images, image memory, processing of mental images	lecture, demonstration, synthesis, guided discovery	
Categorization Keywords: category, concept, prototype	lecture, demonstration, synthesis, guided discovery	
Knowledge representation and organization Keywords: semantic coding, semantic networks, propositional networks, cognitive schemas	lecture, demonstration, synthesis, guided discovery	
Decision making Keywords: expected utility, bounded rationality, ecological rationality	lecture, demonstration, synthesis, guided discovery	
Language Keywords: syntax, semantics, pragmatics, language production, language comprehension	lecture, demonstration, synthesis, guided discovery	
Summative course Keywords: perception, attention, memory, implicit processing, knowledge representation, decision, language	lecture, demonstration, synthesis, guided discovery	
Psychology and cognitive sciences Keywords: cognitive sciences, cognitive psychology	lecture, demonstration, synthesis, guided discovery	

Bibliografie obligatorie:

- Chun, M. & Most, S.B (2021). *Cognition*. Oxford University Press
- Goldstein, E. B., & Cacciamani, L. (2022). *Sensation and perception, Student edition*. Boston, MA: Cengage.
- Goldstein, E. B. (2019). *Cognitive psychology: Connecting mind, research and everyday experience*. (5th ed) Wadsworth Publishing.

!!! From the above references, it is mandatory to learn only the contents taught at the lecture/seminar

Optional references

- Braisby, N., & Gellatly, A. (2012). *Cognitive psychology*. Oxford University Press, capitolul 4
- Bruner, J. (1992). Another Look at New Look 1. *Am. Psych*, 47, 780-783
- Erdelyi, M.H. (1974). A new look at the new look: Perceptual defence and vigilance. *Psych. Rev.* 81, 1-25
- Eysenck, M. W., & Keane, M. T. (2010). *Cognitive psychology: A student's handbook*. Taylor & Francis (6th edition).
- Greenwald, A.G. (1992). New look 3. Unconscious cognition reclaimed. *Am. Psych*, 47, 766-779
- Lachter, J., Forster, K. I., & Ruthruff, E. (2004). Forty-five years after Broadbent (1958): still no identification without attention. *Psychological review*, 111(4), 880-913
- Kuhn, T. S. (1968/2008) *Structura revoluțiilor științifice*. București: Humanitas
- Marr, D. (1982). Vision. În Marr, D. (Ed.) *Vision: A Computational Investigation into the Human Representation and Processing of Visual Information*.
- Miclea, M. & Curșeu, P. L. (2003). **Modele neurocognitive**. Editura ASCR, Cluj-Napoca
- Pylyshyn, Z. (2003). Return of the mental image: are there really pictures in the brain? *TRENDS in Cognitive Science*, 7, 113-118
- Schacter, D. L., Chiu, C. Y. P., & Ochsner, K. N. (1993). Implicit memory: A selective review. *Annual review of neuroscience*, 16(1), 159-182
- Sternberg, R. & Sternberg, K. (2011). *Cognitive psychology*. Cengage Learning (6th edition).

8.2 Seminar / laboratory		
8.2 Seminar / laboratory	Teaching strategies	Remarks
Organizational seminar	lecture, synthesis, conceptual clarification, group activities, guided discovery, discussion	
Replicability	lecture, synthesis, conceptual clarification, group activities, guided discovery, discussion	
Research paradigms in cognitive psychology	lecture, synthesis, conceptual clarification, group activities, guided discovery, discussion	
Attention	lecture, synthesis, conceptual clarification, group activities, guided discovery, discussion	
Short-term and working memory	lecture, synthesis, conceptual clarification, group activities, guided discovery, discussion	
Everyday memory and memory errors	lecture, synthesis, conceptual clarification, group activities, guided discovery, discussion	
Midterm 1 (multiple-choice)	assessment via multiple-choice questions	
Consciousness	lecture, synthesis, conceptual clarification, group activities, guided discovery, discussion	
Implicit processes	lecture, synthesis, conceptual clarification, group activities, guided discovery, discussion	
Social and intercultural cognition	lecture, synthesis, conceptual clarification, group activities, guided discovery, discussion	
Judgement and decision making	lecture, synthesis, conceptual clarification, group activities, guided discovery, discussion	
Midterm 2 (multiple-choice)	assessment via multiple-choice questions	
Social context decisions	lecture, synthesis, conceptual clarification, group activities, guided discovery, discussion	
Organizational seminar	lecture, synthesis, conceptual clarification, group activities, guided discovery, discussion	

Mandatory references:

- Pennington, C. (2023). *A Student's Guide to Open Science: Using the Replication Crisis to Reform Psychology*. Chapters 2 (only first two subsections), 3 and 4.
- Clark, A., & Chalmers, D. (1998). The extended mind. *analysis*, 58(1), 7-19.
- Jiang, Y., Costello, P., Fang, F., Huang, M., & He, S. (2006). A gender-and sexual orientation-dependent spatial attentional effect of invisible images. *Proceedings of the National Academy of Sciences*, 103(45), 17048-17052.
- Eysenck, M. W., & Keane, M. T. (2020). *Cognitive psychology: A student's handbook (Eighth Edition)*. Taylor & Francis. **pp 246-262**
- Loftus, E (2005). Planting misinformation in the human mind: A 30-year investigation of the malleability of memory. *Learning & memory* 12, no. 4 (2005): 361-366;
- Sparrow, B., Liu, J., & Wegner, D. M. (2011). Google effects on memory: Cognitive consequences of having information at our fingertips. *science*, 333(6043), 776-778.;
- Schacter, D. L. (1999). The seven sins of memory: Insights from psychology and cognitive neuroscience. *American Psychologist*, 54(3), 182–203;
- Schacter, D. L. (2021). The seven sins of memory: an update. *Memory*, 1–6.
- paginile 1-3 din Chalmers, D. J. (1995). Facing up to the problem of consciousness. *Journal of consciousness studies*, 2(3), 200-219.
- Secțiunea 2 “Theories of consciousness and relations in construct space” din Fazekas, P., Cleeremans, A., & Overgaard, M. (2023). A construct-first approach to consciousness science. *Neuroscience & Biobehavioral Reviews*, 105480.
- Dienes, Z., Seth, A. (2015) Chapter 6: Consciousness: conscious versus unconscious processes. Available at:
<https://users.sussex.ac.uk/~dienes/Dienes%20and%20Seth%202015%20Conscious%20Ovs%20unconscious%20processes.pdf>
- Chun & Most (2021). Ch. 12, Social cognition (secțiunile 12.1, 12.3);
- de la pag. 395 la 406 din Hahn, A., & Gawronski, B. (2018). Implicit social cognition. *Stevens' Handbook of Experimental Psychology and Cognitive Neuroscience, Developmental and Social Psychology*, 4, 395.
- Capitolul 2 (origins of the social mind) din Nisbett, R. E. (2004). *The geography of thought: How Asians and Westerners think differently ... and why*. Free Press.;
- Jurkat, S., Gruber, M., & Kärtner, J. (2021). The effect of verbal priming of visual attention styles in 4-to 9-year-old children. *Cognition*, 212, 104681.
- Chun & Most (2021). Ch. 9, Judgement and Decision Making (secțiunile 9.1, 9.2 și 9.3)

- Chun & Most (2021). Ch. 10, Reasoning and Problem Solving (sectiunea 10.6)
Facultativ: Sapolsky, R. M. (2017). Behave: The biology of humans at our best and worst. Penguin. Ch 11

!!! From the above references, it is mandatory to learn only the contents taught at the lecture/seminar

Optional references

- Chambers, C. (2017). *The seven deadly sins of psychology: A manifesto for reforming the culture of scientific practice*. Princeton University Press.
- Griffiths, T.L. (2015). Manifesto for a new (computational) cognitive revolution. *Cognition*, 135, 21-23.
- Roediger, H. L. (2004). What happened to behaviorism. *APS Observer*, 17(5), 40-42.
- Quinlan, P. & Dyson, B. (2008). Cognitive psychology. Cap 2 și, din cap 12, pag 444-451
- Eysenck, M. W. & Keane, M. T. (2003). *Cognitive Psychology, A student's handbook*. Introduction (pag1-27)
- Evans, J. S. B. (2008). Dual-processing accounts of reasoning, judgment, and social cognition. *Annu. Rev. Psychol.*, 59, 255-278.
- Schacter, D.L. et al. (2003). The seven sins of memory. Implications for self. *Ann. N.Y. Acad. Sci.*, 1001, 226-239.
- U.S. Department of Justice (1999). *Eyewitness Evidence A Guide for Law Enforcement*

9. Correlations between the content of the course and the expectations of the representatives of the epistemic community, professional associations and representative employers in the field related to the program

The proposed lecture and seminar offer central topics in fundamental and applied research in the fields of cognitive sciences, and their approach is based on the most recent results found in the literature. The course also offers state of the art research skills that are transferable to any scientific and applied field of knowledge.

10. Evaluation

Activity type	10.1 Evaluation criteria	10.2 Evaluation methods	10.3 Weight in the final grade
10.4 Lecture		Written exam	70%
		Research project	30%

10.5 Seminar / laboratory			
10.6 Minimum passing score			
<p>The final evaluation will be based on an oral exam held during the examination session at the end of the second semester.</p> <p>The final grade consists of:</p> <ol style="list-style-type: none"> The score obtained in the oral exam – 60% (maximum 6 points) The score from the two midterm exams – 30% (maximum 3 points) Seminar activity – 10% (maximum 1 point) <p>Minimum cumulative criteria for passing:</p> <ol style="list-style-type: none"> A minimum of 1.5 points (out of 3) from the two midterm exams AND A minimum of 3.5 points (out of 6) on the oral exam <ul style="list-style-type: none"> Students who do not obtain at least 1.5 points from the two midterm exams are not allowed to take the oral exam in that examination session. 			

11. ODD tags (Sustainable Development Goals)¹



Date

27.01.2025

Teacher in charge of the
lecture/course

Lect.dr. Renata Heilman

Teacher in charge of the
lecture/course

Asist.dr. Andrei Costea

Date of approval in the department

Signature of the Head of the department

¹ Păstrați doar etichetele care, în conformitate cu [Procedura de aplicare a etichetelor ODD în procesul academic](#), se potrivesc disciplinei și ștergeți-le pe celelalte, inclusiv eticheta generală pentru *Dezvoltare durabilă* - dacă nu se aplică. Dacă nicio etichetă nu descrie disciplina, ștergeți-le pe toate și scrieți "Nu se aplică".

