



SUBJECT DATASHEET

The psychology of learning and memory

BMETE47MN23

I. SUBJECT DESCRIPTION

1. SUBJECT DATA

Subject name

The psychology of learning and memory

ID (subject code)

BMETE47MN23

Type of subject

contact lesson

Course types and lessons

<i>Type</i>	<i>Lessons</i>
Lecture	2
Practice	0
Laboratory	0

Type of assessment

exam grade

Number of credits

3

Subject Coordinator

<i>Name</i>	<i>Position</i>	<i>Contact details</i>
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Educational organisational unit for the subject

External department

Subject website

<http://cogsci.bme.hu/~ktkuser/KURZUSOK/BMETE47MN23/>

Language of the subject

magyar/angol - HU/EN

Curricular role of the subject, recommended number of terms

Programme: **Psychology Master's Programme - Cognitive psychology specialisation from 2020/21/Term 1**

Subject Role: **Compulsory**

Recommended semester: **1**

Direct prerequisites

Strong None

Weak None

Parallel None

Exclusion None

Validity of the Subject Description

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2. OBJECTIVES AND LEARNING OUTCOMES

Objectives

The aim of the course is to acquaint students with the most important concepts, theories, models, and current results of memory research.

Academic results

Knowledge

1. The student knows and adequately uses the most important concepts used in memory research, knows the most important models and theories of the topic.

Skills

1. Can understand the most important explanatory theories and models of memory phenomena.
2. Ability to communicate in a professionally adequate manner, orally and in writing, about the most important, current results of memory research.

Attitude

1. Open to expanding knowledge related to his/her field.
2. Open and motivated to apply the acquired knowledge.
3. Collaborates with the instructor and fellow students to expand knowledge.

Independence and responsibility

1. Expect and utilize new knowledge.
2. Actively participates in the process of acquiring knowledge.
3. Solves tasks (individually and / or in groups) responsibly and independently.
4. Use a systems approach in your thinking.

Teaching methodology

Lectures, individual and / or small group assignments.

Materials supporting learning

- Tulving, E., & Markowitsch, H. J. (1998). Episodic and declarative memory: Role of the hippocampus. *Hippocampus*, 8, 198-204.
- Conway, M. A. (2005). Memory and the self. *Journal of Memory and Language*, 53, 594-628.
- Cabeza, R., & St. Jacques, P. (2007). Functional neuroimaging of autobiographical memory. *Trend in Cognitive Sciences*, 11, 219-227.
- Baddeley, A. (1997/2001). *Az emberi emlékezet*. Osiris Kiadó, Budapest. 19. fejezet.
- Baddeley, A., Eysenck, M. W., & Anderson, M. C. (2009/2010). *Emlékezet*. Akadémiai Kiadó, Budapest. 2. és 3. fejezet.
- Schacter, D. L., & Addis, D. R. (2007). The cognitive neuroscience of constructive memory: Remembering the past and imagining the future. *Philosophical Transactions of The Royal Society B*, 362, 773-786.
- Baddeley, A., Eysenck, M. W., & Anderson, M. C. (2009/2010). *Emlékezet*. Akadémiai Kiadó, Budapest. 15. fejezet.
- Miyake, A., Friedman, N. P., Emerson, M. J., Witzki, A. H., & Howerter, A. (2000). The unity and diversity of executive functions and their contributions to complex
- Corkin, S. (2002) What's new with the amnesic patient H.M.? *Nature Reviews Neuroscience*, 3, 153-160.
- Vargha-Khadem, F., Gadian, D. G., Watkins, K. E., Connelly, A., Van Paesschen, W., & Mishkin, M. (1997). Differential effects of early hippocampal pathology on episodic and semantic memory. *Science*, 277, 376-380.
- Sara, S. (2000). Retrieval and reconsolidation: Toward a neurobiology of remembering. *Learning and Memory*, 7, 73-84.
- Nader, K. (2003). Memory traces unbound. *Trends in Neurosciences*, 26, 65-72.
- Schmidt, C., Collette, F., Cajochen, C., & Peigneux, P. (2007). A time to think: Circadian rhythms in human cognition. *Cognitive Neuropsychology*, 24, 755-789.
- Diekelmann, S., & Born, J. (2010). The memory function of sleep. *Nature Reviews Neuroscience*, 11, 664-670.
- Paller, K., & Voss, J. L. (2004). Memory reactivation and consolidation during sleep, 11, 664-670.
- Lupien, S. J., Maheu, F., Tu, M., Fiocco, A., & Schramek, T. E. (2007). The effect of stress and stress hormones on human cognition: Implications for the field of brain and cognition. *Brain and Cognition*, 65, 209-237.
- Wolf, O. T. (2009). Stress and memory in humans: Twelve years of progress? *Brain Research*, 1293, 142-154.
- Roediger, H. L., & Butler, A. C. (2011). The critical role of retrieval practice in long-term retention. *Trends in Cognitive Sciences*, 15, 20-27.
- Roediger, H. L., & Karpicke, J. D. (2006). The power of testing memory: Basic research and implications for educational practice. *Perspectives on Psychological Science*, 1, 181-210.

II. SUBJECT REQUIREMENTS

TESTING AND ASSESSMENT OF LEARNING PERFORMANCE

General Rules

The assessment of the learning outcomes set out in point 2.2 is based on the exam and individual or small group project tasks.

Performance assessment methods

Oral / written exam: On the acquisition of students' theoretical knowledge

Percentage of performance assessments, conducted during the study period, within the rating

- project work: 40%

Percentage of exam elements within the rating

- Exam: 60%

Conditions for obtaining a signature, validity of the signature

Issuing grades

Excellent	> 95
Very good	>, = 90
Good	>, = 80
Satisfactory	>, = 70
Pass	>, = 60
Fail	

Retake and late completion

We use the regulations in accordance with the TVSZ. The exam can be replaced during the exam period.

Coursework required for the completion of the subject

28
15
32
15
90

Approval and validity of subject requirements

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III. COURSE CURRICULUM

THEMATIC UNITS AND FURTHER DETAILS

Topics covered during the term

To achieve the learning outcomes set out in section 2.2, the course consists of the following thematic blocks. In the descriptions of the courses announced in each semester, these topics are scheduled according to the calendar and other features.

- 1 Memory processes and systems
- 2 Memory consolidation
- 3 Forgetting
- 4 Development
- 5 Sleep
- 6 Emotion, Stress

Additional lecturers

Approval and validity of subject requirements

The subject data sheet I. and II. beyond Part III. shall be approved by the head of the Department of Cognitive Science indicated in point 1.8 in consultation with the specialist (s) of the relevant field (s).