



**COGNITIVE EXPERIMENTAL PSYCHOLOGY (PRACTICUM)**

<b>Credit points</b>	<b>3 CP</b>		
<b>Study course annotation</b>	The course introduces the main behavioral measures: experimental procedures of implicit associative test and subliminal evaluative priming, as well as non-behavioral measures - encephalography. Practical classes are held at the laboratory of neurocognitive implicit processes. Students acquire the skills of experimenting and working with modern hardware and computer techniques necessary for research activities.		
<b>Aim of the study course</b>	To provide knowledge about the behavioral (implicit) and non-behavioral techniques used to measure implicit attitudes. Get an idea of the possibilities of using methods for recording and analyzing the bioelectric activity of the brain in the field of cognitive neuroscience research		
<b>Objectives of the course</b>	<ul style="list-style-type: none"> <li>To acquaint with the history of methods of implicit social cognition and the prospects for their application in various fields of psychology.</li> <li>To introduce the experimental procedure of unconscious emotional priming and its application in the measurement of implicit attitudes</li> <li>To acquaint with various experimental procedures of the implicit associative test, in relation to the tasks of measuring attitudes to alcohol, healthy and unhealthy foods, and speeding.</li> <li>Acquaintance with the technique of recording and analysis of the electroencephalogram used for different measurements of the cognitive function and implicit attitudes To teach to use computerized methods of collecting and analyzing information.</li> <li>To introduce the computerized program E-Prime.2, which allows the implementation of implicit experimental procedures</li> </ul>		
<b>Study course results</b>	<b>Knowledge</b>	<b>Skills</b>	<b>Competences</b>
	<ul style="list-style-type: none"> <li>Knowledge of the history of the origin and prospects of using methods of implicit social cognition.</li> <li>A critical understanding of issues related to solving scientific problems of cognitive experimental psychology, implicit social knowledge and related areas.</li> <li>Knowledge of the key concepts and basic laws of implicit social cognition that are necessary to create various experimental implicit procedures, as well as their critical assessment.</li> <li>Knowledge of various</li> </ul>	<ul style="list-style-type: none"> <li>Basic skills in conducting experimental implicit procedures.</li> <li>Skill recording and interpretation of electroencephalograms.</li> <li>Skills to adequately select the design of the experiment in accordance with the type of study.</li> <li>Skills of independent conducting implicit neurophysiological studies in the laboratory.</li> <li>Ability to present the study in the form of an experimental report, which consists of a theoretical introduction, a method, results and their discussion.</li> <li>Skills for assessing the quality of measurements used in the study</li> </ul>	<ul style="list-style-type: none"> <li>Ability to develop successful contact and effective communication skills</li> <li>Ability to make decisions and solve problems based on empirically based knowledge in psychology and other social sciences</li> <li>Ability to communicate and defend your ideas and research, both verbally and in writing, in discussions with colleagues, faculty and the general public</li> <li>Development of independent study skills and the ability to expand independently knowledge in the field of theory and practice of cognitive psychology, to develop professional competence.</li> <li>Ability to develop skills in experimenting and working with modern hardware and computer techniques necessary for research activities.</li> <li>The ability to independently</li> </ul>



	<p>types of experimental implicit procedures</p> <ul style="list-style-type: none"> <li>• Knowledge of behavioral and non-behavioral measures used to measure implicit attitudes.</li> <li>• Knowledge of the neurophysiological basics used for the interpretation of data obtained by recording an electroencephalogram</li> </ul>	<ul style="list-style-type: none"> <li>• Ability to innovative approaches in solving complex and unpredictable problems arising during the study</li> <li>• Skills of recording and interpretation of electroencephalograms</li> </ul>	<p>develop and conduct experimental studies using implicit and neurophysiological methods.</p> <ul style="list-style-type: none"> <li>• Ability to take responsibility for decision making in unpredictable research conditions</li> <li>• Observe the ethics of conducting psychological research</li> <li>• Ability to work with information from various sources, as well as to compile scientific reports.</li> <li>• The ability to independently develop and write term and graduation projects.</li> </ul>
<b>Study course content</b>	<b>Topics</b>		
	1	The main methods of implicit social cognition, history and prospects.	
	2	The experimental procedure of subliminalevaluative priming and its application in the measurement of implicit attitudes	
	3	Experimental procedures of implicitassociative test in the measurement of implicit attitudes	
	4	Electroencephalogram as a non-behavioral measure in the study of attitudes	
	5	Purpose of E-Prime. 2. when creating various implicit experimental procedures.	
	6	Electroencephalogram analysis methods.	
	7	Preparation and recording of an encephalogram in an implicit experiment.	
	8	Processing and interpretation of data obtained in an implicit experiment.	
<b>Form of assessment:</b>	Exam		
<b>Obligatory literature:</b>			
<ol style="list-style-type: none"> <li>1. Petty, R. E., Fazio, R. H., &amp; Briñol, P. (Eds.). (2008). Attitudes: Insights from the new implicit measures. Psychology Press.</li> <li>2. Gawronski, B., Payne, K. (Eds.) (2010) Handbook of Implicit Social Cognition. Measurement, Theory, and Applications. Publisher: Guilford Press 626 pp.</li> <li>3. W. Freeman, R. Quiroga (2013). Imaging Brain Function With EEG. Springer. 248 pp.</li> <li>4. Michael Gazzaniga, Richard Ivry, George Mangun. (2019) Cognitive neuroscience : thebiology of the mind. 5th edition. New York . Norton &amp; Company</li> <li>5. Gawronski B., Houwer J. D., Sherman J. W. (2020) Twenty-five years of research using implicit measures. - Social Cognition, Vol. 38, Supplement, pp. S1–S25</li> </ol>			
<b>Further reading list:</b>			
<ol style="list-style-type: none"> <li>1. Plotka, I., Igonin, D., &amp; Blumenau, N. (2016). Implicit Attitudes and Measurements: Effect of Context. International Business: Innovations, Psychology and Economics, 7(2(12)), 7-150. Business Source Complete (EBSCO); Business Source Corporate Plus (EBSCO), Index Copernicus Journal Master List. Online ISSN 2345-0932. Is available at <a href="http://www.kuryba.lt/failai/zurnalai/2016_2.pdf">http://www.kuryba.lt/failai/zurnalai/2016_2.pdf</a></li> <li>2. Simane-Vigante, L., Chuzhuyeva, Y., Plotka, I., &amp; Blumenau, N. (2017). Study of Criminal Attitude towards Violence and Personality Traits in Males. In V. Dislere (Ed.), <i>Proceedings of the 9th International Scientific Conference "Rural Environment, Education, Personality"</i>. 12- 13.05.2017 V.10 - REEP-2017" (pp.166-175).</li> </ol>			



Jelgava: Latvijas Lauksaimniecības Universitāte. ISSN 2255-808X Abstracted/Indexed: Thomson Reuters Web of Science.

3. Plotka, I., Simane-Vigante, L., & Blumenau, N. (2015). Research of Attitudes Towards Criminal Violence with Implicit and Explicit Measures of Cognition. *Journal of Education, Psychology and Social Sciences*, 3(2), 72-77. SCI ISSN: 1339-1488. (Indexed in: GoogleScholar). Retrieved from [https://scholar.google.lv/scholar?q=Research+of+Attitudes+Towards+Criminal+Violence+with+Implicit+and+Explicit+Measures+of+Cognition.&btnG=&hl=en&as\\_sdt=0%2C5](https://scholar.google.lv/scholar?q=Research+of+Attitudes+Towards+Criminal+Violence+with+Implicit+and+Explicit+Measures+of+Cognition.&btnG=&hl=en&as_sdt=0%2C5)
4. Plotka, I., Blumenau, N., Igonin, D., Krasone, S., & Bondarevska, I. (2016). Research of attitudes towards alcohol using implicit and explicit methods. *International Journal of Psychology*, 51(S1), 7, 1092. DOI: 10.1002/ijop.12351. EBSCO, Retrieved from <http://onlinelibrary.wiley.com/doi/10.1002/ijop.2016.51.issue-S1/issuetoc>
5. Plotka, I., Urbane, B., & Blumenau, N. (2015). Explicit and Implicit Measurements of Brand Attitudes for Mobile Operators: Emotional and Cognitive Aspects. *International Business: Innovations, Psychology and Economics* 6 (1(10)), 45-60. EBSCO.

**Other sources of information (electronic journals):**

1. <http://biblio.bsa.edu.lv>
2. Experimental Psychology
3. Learning Memory Cognition
4. Psychological Review

**Changes and additions to the program and literature list are possible during the study process**