

## DOCTORAL STUDIES COURSE UNIT DESCRIPTION

Name of subject	Field of science, code	Faculty / Center	Institute / Department
<b>Development and Fundamental Problems of Cognitive Sciences</b>	H 001	Faculty of Philosophy	Institute of Philosophy
Student's workload	Credits	Student's workload	Credits
Lectures		Consultations	1
Independent study	4	Seminars	

Course annotation
<p>Development of cognitive sciences. Prehistory of cognitive sciences. Critique of behaviourism in psychology: learning without encouragement, cognitive maps, plans and complex behaviours, first models of information processing. Early research on artificial intelligence: algorithm, computation, Turing machines. Critique of behaviourism in linguistics: a formal analysis of language. The emergence of cognitive sciences. The first models of natural language processing, imagery debate, computational, algorithmic, and implementation levels of analyses. Mental representations. Turning towards neurology: neural network models, PET, fMRI technologies. New challenges: the problem of consciousness, dynamic systems, experimental philosophy.</p> <p>Basic problems of cognitive sciences. The problem of integration: local and global integration, inter-theoretical reduction, levels of interpretation, mental architecture. Controversy over common information processing models: symbolic, connectionist, and dynamic information processing models. The problem of mental architecture: the hypothesis of mass modularity. The evolution of cognition. Frame problem, embodied and contextual cognition. Culture and cognition. The problem of consciousness: reductive and anti-reductive arguments. Predictive coding in perception and cognition. Assessment requirements are related to the topic of the dissertation and are determined individually.</p>

Reading list
<b>Basic literature</b>
1. Chalmers, D. J. 1996. <i>The Conscious Mind</i> . Oxford: Oxford University Press.
2. Chomsky, N. 1957. <i>Syntactic Structures</i> . The Hague: Mouton.
3. Churchland, P. S. 1986. <i>Neurophilosophy</i> . Cambridge, MA: MIT Press.
4. Clark, A. 1997. <i>Being There</i> . Cambridge, MA: MIT Press.
5. Dreyfus, H. L. 1972. <i>What Computers Can't Do</i> . New York: MIT Press.
6. Fodor, J. 1983. <i>The Modularity of Mind</i> . Cambridge, MA: MIT Press.
7. Fodor, J. 1975. <i>Language of Thought</i> . Cambridge, MA: Harvard University Press.
8. Marr, D. 1982. <i>Vision</i> . San Francisco: W. H. Freeman.
9. Port, R. F.; Van Gelder, T., eds. 1995. <i>Mind as Motion</i> . Cambridge, MA: MIT Press.
10. Rumelhart, D. E.; McClelland, J. L. and the PDP Research Group. 1986. <i>Parallel Distributed Processing</i> . Cambridge, MA: MIT Press.

<b>Additional literature</b>
1. Bermúdez, J. L. 2014. <i>Cognitive Science</i> . Cambridge: Cambridge University Press.
2. Carruthers, P. 2011. <i>The Opacity of the Mind</i> . Oxford: Oxford University Press.
3. Carruthers, P.; Laurence, S.; Stich, S., eds. 2005-7. <i>The Innate Mind</i> , Vol. 1-3. Oxford: Oxford University Press.
4. Churchland, P. M. 2007. <i>Neurophilosophy at Work</i> . Cambridge: Cambridge University Press.
5. Damasio, A. 2010. <i>Self Comes to Mind</i> . New York: Pantheon Books.

6. Gallagher, S.; Schmicking, D., eds. 2010. Handbook of Phenomenology and Cognitive Science. Dordrecht: Springer.
7. Kahneman, D. 2011. Thinking, Fast and Slow. New York: Farrar, Straus, and Giroux.
8. Knobe, J.; Nichols, S., eds. 2008. Experimental Philosophy. Oxford: Oxford University Press.
9. Margolis, M.; Samuels, R.; Stich, S., eds. 2012. The Oxford Handbook of Philosophy of Cognitive Science. Oxford: Oxford University Press.
10. Stainton, J., ed. 2006. Contemporary Debates in Cognitive Science. Oxford: Blackwell.

The names of consulting teachers	Science degree	Main scientific works published in a scientific field in last 5 year period
Renatas Berniūnas	Dr.	<p><b>Berniūnas, R.</b>, Silius, V. Dranseika, V. (2021). Moralization East and West: Moralizing different transgressions among Chinese, Americans and Lithuanians. <i>Asian Journal of Social Psychology</i>. DOI: 10.1111/ajsp.12479</p> <p><b>Berniūnas, R.</b>, Beinorius, A., Dranseika, V., Silius, V., Rimkevičius, P. (2021). The weirdness of belief in free will. <i>Consciousness and Cognition</i>, 87, <a href="https://doi.org/10.1016/j.concog.2020.103054">https://doi.org/10.1016/j.concog.2020.103054</a></p> <p><b>Berniūnas, R.</b>, Dranseika, V., Delgermend, T. (2020). Between Karma and Buddha: prosocial behavior among Mongolians in an anonymous economic game. <i>The International Journal For The Psychology Of Religion</i>, 30 (2), pp. 142–160. DOI: <a href="https://doi.org/10.1080/10508619.2019.1696497">10.1080/10508619.2019.1696497</a></p> <p><b>Berniūnas, R.</b> (2020). Mongolian “Yos surtakhuun” and WEIRD “Morality. <i>Journal of Cultural Cognitive Science</i>, 4, 59–71 <a href="https://doi.org/10.1007/s41809-019-00045-1">https://doi.org/10.1007/s41809-019-00045-1</a></p> <p><b>Berniūnas, R.</b>, Silius, V. Dranseika, V. (2019). Beyond the moral domain: the normative sense among the Chinese. <i>Psichologija</i>, 60, pp. 86-105. doi: <a href="https://doi.org/10.15388/Psichol.2019.11">10.15388/Psichol.2019.11</a>.</p>
Jonas Dagys	Dr.	<p>Berniūnas, R., Dagys, J., Dranseika, V., (2017). „Proper names, rigid designation, and empirical studies on personal identity“ // <i>Topoi. An International Review of Philosophy</i>. ISSN: 0167-7411.</p> <p>Dagys, J., (2014). „Pastabos apie neverbalinio kontinuumo idėją“ // <i>Problemos</i> 2014 Priedas, p. 18-28. (Thomson Reuters Web of Science Arts &amp; Humanities Citation Index)</p> <p>Dagys, J., Dranseika, V., Grenda, V., Vasilionytė, I., „Reduktyvizmo raiška šiuolaikinėje analitinėje filosofijoje“. - <i>Problemos</i>, Nr. 85, Vilnius, 2014, p. 141-152.</p> <p>Dagys, J., „Šiuolaikinė psichofizinio reduktyvizmo ir antireduktyvizmo polemika ir jos metodologinės išdavos“. - <i>Problemos</i>, priedas, Vilnius, 2012, p. 22-36.</p> <p>Dagys, J., "Putnamian anti-envattor ver. 3.00: new features - same results". - <i>Problemos</i>, Nr. 77, Vilnius, 2010, p. 39-48.</p>
Marius Povilas Šaulauskas	Prof.	„Revizionistinis konstruktiviojo empirizmo

normatyvumas“ (kartu su J. Bujoku). - Problemos, Nr. 83, Vilnius, 2014, p. 48-61;  
„Heideggerio bylos“ byla: filosofijos silpnatvė ir stiprybė“ (kartu su L. Adomaičiu). - Sociologija. Mintis ir veiksmas, nr. 1 (34). Vilnius: VU ir KU, 2015, p. 5-15;  
„Frege's Bedeutung kaip reikšmė ir kaip nurodymas“ (kartu su A. Plėšniu). - Problemos, Nr. 91, Vilnius, 2017, p. 29-43;  
„Ecological citizenship: habitus of care in the public sphere“ (kartu su A. Bartkiene, R. Bikauskaite). - Problemos. Vilniaus universiteto leidykla, 2018, t. 93, p. 129-141;  
„Rethinking Ecological Citizenship“ (kartu su A. Bartkiene, R. Bikauskaite, D. Mincyte). - Vilnius, Lithuania: Vilnius University Press, 2019.

Certified during Doctoral Committee session on 2019-10-22. Protocol No. 250000-KI-41

Committee Chairman prof. Marius Povilas Šaulauskas