

5FI404 KOGNITIVNÍ VĚDA

Course code	5FI404
Course title in language of instruction	Kognitivní věda
Course title in Czech	Kognitivní věda
Course title in English	Cognitive Science
Mode of completion and number of credits	Exam ECTS (6 credits), Exam (4 credits) One ECTS credit corresponds to 26 hours of workload for an average student.
Type of course	Daily attendance: 4/0 (hours of lectures per week / hours of seminars per week)
Language of instruction	Czech
Level of course and year of study	master: 1; master continuing: 4
Semester	Sklad NF – NF
Name of lecturer	doc. PhDr. Karel Pstružina, CSc. (examiner, instructor, lecturer, supervisor)
Prerequisites	none

Aims of the course

The course is designed for students interested in the cognitive processes. Neuroscience and theory of artificial intelligence findings are treated as foundations for human cognition philosophical interpretations.

The cognitive science is a new science in the field of cognition and the ambition of the course is to introduce the students to the corresponding problems.

Learning outcomes and competences

Upon successful completion of this course, students will be able to understand the essential characters of human cognition as well as the basic features of cognition in the sphere of artificial intelligence.

Course contents

The course provides survey of the most important epistemological conception in relation to neuro-physiology, psychology and artificial intelligence.

The course exposition starts with presentation of the neuro-physiological findings in the fields of brain, thinking and science as well as their cohesion. Main course topics includes:

- interpretation of physicalist approach and mentalistic approach relation;
- analysis of thinking based on models of thinking;
- creativity of thinking.

Teaching methods and student workload

Type of teaching method	Hours of workload
	daily attendance
Participation in lectures	52
Preparation for final oral exam	104
Total	156

Assessment methods

Requirement type	Weight
	daily attendance
Active lecture/seminar/workshop/tutorial participation	20 %
Term paper	30 %
Final oral exam	50 %
Total	100 %
Special requirements and details: none	

Recommended reading

Type*	Author	Title	Published in	Publisher	Year	ISBN
R	PSTRUŽINA, K.	Svět poznávání : (k filozofickým základům kognitivní vědy)	Olomouc	Nakladatelství Olomouc	1998	80-7182-074-1
R	PSTRUŽINA, K.	Etudy o mozku a myšlení	Praha	Vysoká škola ekonomická	1994	80-7079-280-9
A	CRICK, F.	Věda hledá duši : překvapivá domněnka	Praha	Mladá fronta	1997	80-204-0633-6
A	NOSEK, J.	Mysl a tělo v analytické filosofii : úvod do teorií psychofyzického problému	Praha	Filosofia	1997	80-7007-091-9
A	FODOR, J. A.	The mind doesn't work that way : the scope and limits of computational psychology	Cambridge	MIT Press	2001	0-262-06212-7
A	ECCLES, J. – POPPER, K.	The Self and its Brain				990000303X
A	ECCLES, J. C.	The human mystery : the GIFFORD lectures University of Edinburgh 1977-1978	Berlin	Springer International	1979	0-387-09016-9
A	CHURCHLAND, P.	Neurophilosophy				990000335X
A		Pojednání o lidském myšlení II, Praha, Ekopress 2007, ISBN 80-86929-18-3				
A		Pojednání o lidském myšlení, Praha, Ekopress, ISBN 80-86119-89-0				

* R – required reading, A – additional reading