



## Prof. Harold Boley

National Research Council, Canada



## Logical Foundations of Cognitive Science

VO, 2 Semesterwochenstunden

### Abstract:

Cognitive Science is the scientific study of the mind, drawing on Psychology, Neurophysiology, Philosophy, and Artificial Intelligence (AI). This course is an introduction to the logical foundations of Cognitive Science, including its ontological distinctions. It will present surprising new theories on issues about our own minds that have puzzled philosophers for millennia. It will engage students in discussions and encourage them to reconsider or formalize their own theories using AI knowledge representations. These topics will be dealt with: What is Cognitive Science? Roles of Logic in Cognitive Science. The Mind-Body Problem. Dualism, Materialism. Pros and Cons of Functionalism: The Chinese Room. Levels of Description. Classic AI. Intentionality. Mental Representations. Mental Modules. The Language of Thought Hypothesis. Folk Psychology and Eliminativism. Instrumentalism. Connectionism. Connectionism vs. Language of Thought and vs. Modularity of Mind. Consciousness: the Hard Problem. Concepts of Consciousness. Contra Physicalist Theories of Consciousness: the Knowledge Argument. Is thinking unconscious? Is there Free Will?

**Time:** First Lecture: 20.10.2008, 13:15

The succeeding lectures will be held between 27.10. and 3.12.08 always on  
Monday and Wednesday, 15:15 – 16:45

**Place:** Gußhausstraße 27-29, CD 0404

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[www.ict.tuwien.ac.at/lva/Boley\\_LFCS/index.html](http://www.ict.tuwien.ac.at/lva/Boley_LFCS/index.html)



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