Aim of the course

Aim of the course: Historical and conceptual introduction to cognitive science from a combined philosophical, psychological, biological and computational point of view. We start with the prehistory of the cognitive paradigm and discuss how cognitivism endeavours to solve its problems. We characterize classic cogsci from the point of view of language, formal systems, and computations and discuss its basic philosophical underpinnings as well as the arising problems. Then we turn to connectionism and the soft computing, brain theory inspired metaphors of the mind, to conclude with the modern picture (and its criticism) in embodiment, the “dynamic hypothesis” as well as the new philosophy of mind.

Learning outcome, competences

knowledge:
• knows the introductory theories of cognitive sciences
• knows the most important expressions and phenomena of cognitive sciences

attitude:
• comprehensive theoretical interest

skills:
•

Content of the course

Topics of the course
• I. The Nature of Cognitive Science
  • 1. From Behaviorism to Cognitivism
  • 2. Intentionality, Folk Psychology and the Animals
  • 3. Functionalism and the Mind/Body Problem
  • II: The Representational Theory of the Mind
    • 1. Mind and Language. The Classical Symbolic Picture
    • 2. Origins of the Computer Metaphor
    • 3. Can Machines Think? The Turing Test and Understanding
  • III. The Subsymbolic Paradigm and Related Matters
    • 1. Connectionism
    • 2. Elimination, Supervenience and Identity Theories
    • 3. Individualism versus the Social Theory of Mind
    • IV- Mind and Body
    • 1. Consciousness and Qualia
    • 2. The Dynamic Hypothesis
    • 3. Embodiment

Learning activities, learning methods
Evaluation of outcomes

Learning requirements, mode of evaluation, criteria of evaluation:
- requirements
- 

mode of evaluation: oral or written exam
criteria of evaluation:
- Knowledge on basic concepts
- the skill of utilizing the models and methods of cognitive sciences

Reading list
- **Recommended reading list**
  - I/1. From Behaviorism to Cognitive Science
  - I/2. Intentionality, Folk Psychology, and Animal Intelligence
  - I/3. The Mind-Body Problem. Functionalism
  - II/1. Mind and Language. The Representational Conception
  - II/2. The Computational Metaphor
  - II/3. Can Machines Think?
• III/1. Symbolic and Subsymbolic Processing
• IV/2. Dynamical Models of the Mind