



# LANGUAGE AND MIND

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**INTENDED AUDIENCE :** Anyone interested in the topic.

### COURSE OUTLINE :

Language learning can be put under three broad perspectives. Some believe language is pairing of lexicon and syntax i.e. of words and the set of rules that defines how we can combine those words most fundamental of these rules are innate i.e. they are already there in the human mind before it is exposed to society. This means there is perhaps an innate Language Faculty. Still others believe that General Cognitive Abilities that account for other kinds of learning can also account for language. There are many others who strongly believe that language is essentially socially embedded and that all learning takes place through social interactions. This course will briefly account for the most convincing position and will argue for it from generative perspective and biological foundations of language. Throughout the course we will try to be familiar with relationship between language and human mind; to understand language as a special purpose cognitive ability; and to understand underlying mental computation for natural language processing.

### ABOUT INSTRUCTOR :

Prof. Rajesh Kumar is a professor of linguistics in the Department of Humanities and Social Sciences at the Indian Institute of Technology Madras, Chennai. He obtained his PhD in linguistics from the University of Illinois at Urbana-Champaign. Prior to joining IIT Madras, he taught at IIT Kanpur and IIT Patna in India and at the University of Texas at Austin in the USA. He has been a visiting faculty at the Tata Institute of Social Sciences in Mumbai in India. His book on Syntax of Negation and Licensing of Negative Polarity Items was published by Routledge in their prestigious series Outstanding Dissertations in Linguistics in 2006. He has been associate editor of the journal Language and Language Teaching. He has been part of the language teaching program at all the institutions he has been affiliated with. The broad goal of his research is uncovering regularities underlying both the structural form (what language is) and sociolinguistic functions (what language does) of natural language. He works on structure of South Asian Languages. He is keenly interested in issues related to language (multilingualism) in education; politics; human cognition; and landscape.

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### COURSE PLAN :

#### Week 1: On Language

- What is Language?
- What is scientific about language?
- How is language constitutive of being human?
- Distinction between human and non-human language
- Origin of language
- What is the relationship between language and mind?
- How do children acquire language?
- Nature of learning language
- Generative foundation of language acquisition
- Biological foundation of Language
- Language acquisition device
- Universal grammar

#### Week 2: Language in Mind

- Acquisition and/or learning
- I-language and Innateness
- Patterns – Universal Grammar
- Human Brain
- Language deficit/ loss

**Week 3: Patterns in sounds and words**

- Sounds
- Vowels/Consonants
- Places and manners of articulation
- Features of sounds

**Week 4: Words and sentences**

- Words
- Constraints of patterns in words
- Cluster as constraints
- Syllables

**Week 5: Grammar**

- Parts of sentences
- Subjects/ Predicates
- Lexical categories
- Functional categories
- Nature of verbs

**Week 6: Advanced Grammar**

- Complement/ adjunct
- Restrictions
- Semantic relations
- Case
- Movement

**Week 7: Levels of representation and principles of grammar**

- Movement/displacement
- Motivation for the movement
- Complementizer phrase
- Case assignment
- Passive morphology and NP movement
- D structure
- Binding theory
- Indices and antecedents
- Co-indexing
- Constraints

**Week 8: Language and cognition**

- Compound verb
- Negation
- Language and Cognition
- Goal of cognitive sciences
- Computational linguistics- goals, breakthroughs and challenges
- Language and mind