A Course Proposal

On

Introduction to Language and Linguistics

(Elective Course for UG)

Submitted by

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Indian Institute of Technology, Kharagpur Kharagpur-721 302

Course name:

Introduction to Language and Linguistics (L-T-P: 3-1-0, Credit-4)

Proposed Course Instructors:

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Department of Humanities and Social Sciences

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2. Dr. JayashreeChakraborty

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3. Dr. Somdatta Bhattacharya

Assistant Professor

Department of Humanities and Social Sciences

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Whether the subject will be offered as compulsory or elective: Elective

The semester in which the subject will be offered: Both

Session, Semester from which the subject is going to be offered: Spring, 2018-19

Course Overview and Objectives:

Studies on language fascinated people for a long time. As a result, different approaches and different perspectives for the studies on languages have emerged. There have been studies related to origin of language, language change, use of different scripts, speech sounds, studies of grammar and lexicon etc. The study of language in the discipline of linguistics has taken a major turn in last few decades. The study of language is considered as the door to the study of

human mind. Language is perceived as a computational system, rather than simply a means of communication or a social object. Different studies on languages are raising interdisciplinary questions. In today's world, linguistics is related to the disciplines of evolutionary biology, anthropology, psychology, neuroscience and artificial intelligence.

Analysis of language at different levels (sound, word, phrase, sentence, meaning or context) is becoming indispensable for the studies of language technology. Thus, there is a need to talk about different perspectives of language (including the structure and variation of language) for the students interested in different aspects of language technology.

The course tries to give an overview of:

- The idea of the Knowledge of Language and the idea of Grammaticality
- Use of language in different contexts
- Techniques for analysing languages at different levels (sound, word, sentence etc.)
- Typological and areal features of languages
- Use of scripts in Indian context

The objectives of the course are:

- To provide the students with the idea of grammaticality judgments and the structures of language in terms of analysis at different levels, e.g. sound, word, sentence etc.
- To help the students to make hypothesis on the rules of language and test the hypothesis.
- To discuss the diversity of languages in relation to the typological features of languages.

Overlap with any other Subject offered by the Institute:

Speech and Natural Language Processing (CS60057), 5%

Reason for Offering the New Subject in spite of the overlap:

The course Speech and Natural Language Processing talks about analysis of language from a perspective of computer science. The proposed course titled Introduction to language and Linguistics talks about the analysis of language from a perspective of linguistic analysis and theory.

Rationale for offering the New Subject:

- Analysis of languages is used in diverse fields in today's world. Thus it is important to understand the theoretical perspectives of language analysis.
- The basic concepts of phonetics and some relevant concepts of phonology (e.g. phonotactic rules) can help students interested in Speech-to-Text and Text-to-Speech interface.
- Knowledge of morphological analysis can be helpful for students interested in shallow parsing. Learning the techniques of morphosyntactic analysis can help to conduct parsing tasks.
- Students interested in Natural language Processing can use their knowledge of tree diagram in syntax. If students are interested in Machine/Automatic Translations and Speech Recognition, learning syntactic analysis can be helpful for them. Ideas on lexical semantics and basic pragmatics can also be helpful in this regard.
- Students interested in studying Semantic Network can get some help from the knowledge of basic semantics.
- Knowledge on the use of language in various contexts can help one to understand the
 potential variation in language and understand the context dependent factors as a
 whole.

Scope as a Discipline:

- The field of Language Technology is becoming more diverse every day. Different companies (like Google and Microsoft) have been hiring people with knowledge of linguistic analysis. This is increasing the scope of linguistics as a whole.
- The use of digital dictionaries and digital material are growing very fast with the growing consciousness on the studies of Endangered Languages worldwide (Foe example, UNESCO, Foundation for Endangered Languages).

Course Syllabus:

- **1. Introductory Ideas:** The section introduces the notion of Language as an object of enquiry. The section discusses basic ideas related to the theory of language.
 - 1.1.Features of human language
 - 1.2. Role of linguistics in history

- 1.3.Levels of linguistic analysis
- 1.4.Knowledge of language
- 1.5. Langue and Parole, Competence and Performance.
- **2. Introductory Phonetics and Phonology:** The section introduces the production and classification of Speech Sounds. It also discusses the analysis of Sound Patterns.
 - 2.1.Sound and sound system
 - 2.2.Segments and Suprasegments
 - 2.3. Classification of segments
 - 2.4. International Phonetic Alphabet.
- **3. Introductory Morphology:** The section introduces analysis of Words and Wordparts.
 - 3.1. Basic morphology
 - 3.2 Inflection and Derivation
 - 3.3 Root, Base and stem
 - 3.4 Morphological analysis
 - 3.5 Word formation processes.
 - 3.6. Basic ideas of Paninian grammar
- **4. Introductory Syntax:** The section talks about analysis of Phrases and Sentences.
 - 4.1. Sentence, Utterance and Proposition
 - 4.2 Acceptability and Grammaticality
 - 4.3 Universal Grammar and Parameters
 - 4.4 Rules of language
 - 4.5 Tree and Linearization
 - 4.6 Constituency tests
 - 4.7 Structural relations
 - 4.8 X-bar theory
 - 4.9 Theta theory and lexicon.

5. **Semantics and Pragmatics:** This particular section focuses on the role of Meaning and Contexts in linguistic analysis.

5.1 Introduction to lexical semantics

5.2 introducing basic notions of pragmatics

6. **Typology and Universals:** The section introduces different types of languages based on their structure. The section also focuses the common structures that are found across different languages.

6.1 Language Universals and Typological Classification

6.2 Linguistic Area, India as a Linguistic Area,

6.3 Morphosyntactic features of South Asian languages.

6.4 Language and scripts: The Indian context

Topics for Tutorial:

The tutorial will help the students to reflect on their own language (or any other language chosen), build hypothesis on the rules of language and test the hypothesis with analysis. It will also help students to understand the linguistic diversity, multilingualism and language contact situations around us.

• Experiments on data on grammaticality judgments

• International Phonetic Alphabet, using the IPA interactive websites to learn the sounds

 Analysis of speech sounds, using Software to cut and preserve sounds: PRAAT and AUDACITY

• Finding phoneme inventory and phonological rules of a language

• Doing Morphological analysis

• Analysis of sentences and phrases: using tree diagrams

• How to gloss data using Leipzig Glossing Rules

Texts:

1. Carnie, A. 2013. Syntax: A Generative Introduction. Wiley-Blackwell.

- 2. Fromkin, V., Rodman, R. and Hyams, N. 2003. An Introduction to Language. Thomson/Heinle.
- 3. Haegeman, L. 1994. Introduction to Government and Binding Theory. Wiley-Blackwell.
- 4. Katamba, F. 1993. Morphology. Palgrave-Macmillan.

References:

- 1. Adger, D. 2003. Core Syntax: A Minimalist approach. Oxford University Press.
- 2. Bauer, L. 1988. Introducing Linguistic Morphology. Edinburgh University Press.
- 3. Bhate, S. and Kak, S. 1993. 'Panini's Grammar and Computer Science' in *Annals of the Bhandarkar Oriental Research Institute*, Vol. 72, pp. 79-94.
- 4. Comrie, B. 1989. Language Universals and Linguistic Typology. University of Chicago Press.
- 5. Crystal, D. 2008. A Dictionary of Linguistics and Phonetics. Blackwell.
- 6. Diringer, D. 1996. The Alphabet: The Key to the History of Mankind. South Asia Books.
- 7. Emeneau, W.B. 1964. 'India as a Linguistic Area' in Dell Hymes (ed.) Language and Culture in Society: A Reader in Linguistics and Anthropology. Harper and Row Publishers.
- 8. Ladefoget, P. 2001. Vowels and Consonants: An Introduction to the Sounds of the Languages of the World. Blackwell.
- 9. Levinson, S.C. 1983. Pragmatics. Cambridge University Press.
- 10. Masica, C.P. 2005. Defining a Linguistic Area. University of Chicago Press.
- 11. Saeed, J. 1997. Semantics. Blackwell.
- 12. Verma, S.K. and Krishnaswamy, N. 1997. Modern Linguistics: An Introduction. Oxford University Press.

Topics for Lecture Classes:	Total number	Topics for	Total
	of Lecture Classes	Tutorial Classes	Number of Tutorial
	Clusses		Classes
Introduction to the course	1.1.1.1.4	Experiments	1
Role of linguistics in history	1+1+1+1=4	with Grammaticality Judgments	
Features of Human Language			
Levels of Linguistic Analysis			
Knowledge of Language		Experiments	1
Langue and Parole, Competence and Performance	1+1+1=3	with Grammaticality Judgments	
Universal grammar and Parameter			
Sound and sound system		Phoneme	1
Segments and Suprasegments	1+1+2=4	Inventory and Phonological Rule	
Classification of segments			
International Phonetic Alphabet (IPA)	2	Transcription with IPA	2+2=4
		Using PRAAT and AUDACITY	
Introduction to morphology, Basic units of morphology, Root-Base-Stem	1+1+1+1=4	Morphological Analysis with data set	2
Inflection, Derivation and Word Formation processes		data set	
Doing Morphological Analysis			
Basic ideas of Paninian Grammar			
Sentence, Utterance and Proposition		Syntactic	1
Acceptibility and Grammaticality	1+1+1=3	Analysis with data set	
Universal Grammar and Parameters			
Rules of Language		Syntactic	1
Tree and Linearization	2+2=4	Analysis. Drawing Trees	

Constituency Test	1+1=2	Syntactic Analysis.	1
Structural Relation		Drawing Trees	
X-Bar Theory		-	
	2+1=3		
Theta Theory and Lexicon			
Introduction to Lexical Semantics		-	
	2+1=3		
Introducing basic ideas of Pragmatics			
Language Universal and Typological		How to gloss	1
Classification	1+1+1=3	data (using	
		Leipzig	
Linguistic Area		Glossing Rule)	
India as a Linguistic Area			
Morphosyntactic Features of South-Asian		How to gloss	1
Languages	2+2=4	data (using	
		Leipzig	
Language and Scripts: The Indian Context		Glossing Rule)	
Total number of classes		Total Number of	14
	39	Tutorials	

Short Description of the Course:

The course aims to give an overview of the rules and representations underlying the structures of languages in general. The course provides some ideas on the analysis of sounds and sound systems, analysis of sound segments and the International Phonetic Alphabet; analysis of words in terms of different parts of words; analysis of sentences in terms of constituents, phrase structure, tree diagrams etc. The course also briefly talks about the components of meanings associated with words and basic analysis using the context. The course also discusses different structural types of the world's languages in terms of the typological structure and briefly discusses the scripts in Indian contexts.

Names of Departments/Centres/Schools/Programmes whose students are expected to register for this subject: UG 3rd Year, All Departments