MA Computational Linguistics – Course Descriptions (Semester IV-January – May 2023)

Course Title	**Introduction to Sociolinguistics**
Course Code	LS 163
Semester	IV
No. of Credits	5
Days/Timings	Monday & Thursday: 9.00 – 11.00 am.
Name of Faculty Member(s)	Dr. Smita Joseph
Course Description: 150/200 words	The course will introduce the key topics in the field. Some of these topics are: • Sociolinguistic variation, • Style, • Attitudes, • Politeness, • Multilingualism, • Real time and apparent time, • Class, • Networks, • CosP, • Gender, • Language contact. The examples/case studiesused to discuss these topicswill be taken from varied linguistic and cultural contexts. By the end of the course, students will be able to: • Define sociolinguistic variation in their own words, • Identify instances of sociolinguistic variation in their MT, • Discuss and identify the social factors that cause language variation. **Core reading:** • Meyerhoff, M. (2006). *Introducing sociolinguistics*. London & New York: Routledge. **Additional reading (more readings to be added):** • Labov, W. (1972). *Sociolinguistic patterns*. Philadelphia: University of Pennsylvania Press. • Gumperz, John, J. (1958). Dialect differences and socialstratification in a north Indian Village. *AmericanAnthropologist, 60*(4), 668-81.
Evaluation	Mid-semester exam: 40% End-semester exam: 60%

Course Title	**Introduction to Head-driven Phrase Structure Grammar**
Course Code	**LS 188**
Semester	IV
No. of Credits	5
Days / Timings	Monday & Friday: 11.00 – 1.00 pm
Name of Faculty Member(s)	Prof. M. Hari Prasad
Course Description: 150/200 words	This course surveys the basic aspects and results of Head-Driven Phrase Structure Grammar (HPSG) a well developed, mathematically precise, framework for syntactic analysis via simultaneous constraint satisfaction. Wherever possible, we also compare this approach with competing approaches in other frameworks. Topics discussed include: Feature structures, the linguistic sign, basic clause structures, phrasal projection, the hierarchical organization of lexical and phrasal information, semantic principles, binding theory and dependencies. Ivan A. Sag Thomas Wasow. 1990. Syntactic Theory:A Formal Introduction
Evaluation Scheme	Mid-term: Final::40:60

Course Title	**Semantics II**
Course Code	**LS 251**
Semester	IV
Day/Timings	Wednesday & Friday : 3.00 – 5.00 pm
No. of Credits	5
Course Prerequisites:	LS 151 or equivalent.
Name of Faculty Member(S)	Dr. Utpal Lahiri
Course Descriptions:	This course is a continuation of Semantics I (LS 151), and is intended to give a basic introduction to advanced topics not covered in LS 151. Topics include: Logical Form and Quantifiers Generalized Quantifier Theory Lambda Calculus Adverbial Modification and Event Semantics; tense, aspect Anaphora and Indexicals. Altshuler, D., T. Parsons and R. Schwarzschild (2018). *A Course in Semantics*. MIT Press. Recommended texts: Chierchia, G. and S. McConnell-Ginet (2000). *Meaning and Grammar*. MIT Press (2nd Edition) Heim, I. and von Fintel (2007). *Notes on Intensional Semantics*. Ms., MIT (downloadable)
Evaluation Scheme	40%: Assignments 60%: End semester examination

Course Title	**Introduction to Neuro Linguistics**
Course Code	**LS 291**
Semester	IV
Day / Timings	Tuesday & Thursday: 11.00 – 1.00 pm
No. of Credits	5
Name of Faculty Member(S)	Prof. Hemalatha Nagarajan
Course Prerequisites:	Syntax I and Phonology I
Course Descriptions:	This is a course that takes students on a tour through the brain, highlighting the structures that play key roles in language production and perception. It provides a broad and up-to-date introduction to the rapidly developing field of neurolinguistics. It focuses on both first and second language acquisition and hence is of special interest to students of theoretical linguistics and applied linguistics. It is meant for anyone who wishes to have a firm grounding in this area. From hemispheres to neurons, students gain an understanding of how the brain handles grammar, meaning, and sound. They will learn what the information is that makes the processes of speaking and understanding, reading and writing a language possible, how it is acquired, and how and where it is represented in the brain. To understand these aspects, evidence is drawn from linguistics, aphasiology, and cognitive neuroscience.
Evaluation Scheme	Mid term: Final: 40: 60

Course Title	**Introduction to Tagging and Parsing**
Course Code	**LS 277**
Semester	IV
Day/Timings	Tuesday & Thursday: 2.00 – 4.00 pm
No. of Credits	5
Name of Faculty Member(S)	Dr. Atreyee Sharma
Course Descriptions:	It is a follow up of the first course of the same name. In the first part students are exposed to the first layer of Tagging and Parsing namely, Morphological Analyzer, Parts of Speech Tagging, Named Entity and Named Entity Recognition. In the first part LS-277 that is, students read and research on different tag sets, models, challenges and issues regarding Morphological Analyzer, POS Tagging and NER wrt Indian languages. In this course, they will be exposed to Local Word Grouping, Chunking, Parsing and Tree Banks. Shallow parsing or chunking or light parsing) will be taught in terms of analysis of a sentence which first identifies constituent parts of sentences (nouns, verbs, adjectives, etc.) and then links them to higher order units that have discrete grammatical meanings (noun groups or phrases, verb groups, etc.). The term Parsing has slightly different meanings in different branches of linguistics and computer science. Traditional sentence parsing is often a method of understanding the exact meaning of a sentence or word, sometimes with the aid of devices such as sentence diagrams. Students will be introduced to the concepts of LWG, Chunking and Parsing and work out real world data to understand the terms and their significance in the world of NLP
Evaluation Scheme	Mid-term: Final::40:60

Course Title	**Phonetics: Indian Traditions**
Course Code	**IND 304**
Semester	IV
Day / Timings	Tuesday & Friday : 2.00 – 4.00 pm
No. of Credits	5
Name of the Faculty Member(s)	Dr. Nilakantha Dash

Course Description 150/200 words	The course aims at introducing the students to the oral traditions of vedic chanting and the importance of phonetics.
	A. **Topics for Study :**
	  1. A brief historical survery
	  2. Vedic Literature and Vedanga
	  3. Texts ending with Siksha or Pratishakhya
	  4. Treatment of *savarna* in Astadhyayi of Panini.
	  5. Process of Knowing and speaking
	  6. Good speaker and bad speaker
	
	B. A close reading of Paniniya Siksa and Taittiriya Pratisakhya

Evaluation Scheme	40= Assignment, 60= Written test.

Course Title	**Language and Reading Disorders**
Course Code	**LS 364**
Semester	IV
Day / Timings	Tuesday: 2.00 – 4.00 pm Wednesday: 11.00 – 1.00 pm
No. of Credits	5
Name of Faculty Member(s)	Prof. Shruti Sircar
Course Prerequisites:	Morphology I / Syntax I /An Introduction to Language Acquisition
Course Description: 150/200 words	This course has two parts: one dealing with language disorders, and the other with reading related disorders. The first part will look at why it is necessary to study language related disorders like Aphasia and Specific Language Impairment (SLI), and delink them from disorders which pertain to cognition and intelligence such as Down's Syndrome and William's syndrome. The thrust of this part is to argue for the domain specificity of language, and identify the areas/segments of language that language-specific disorders affect. The second part deals with an exploration of how literacy skills develop in children, and relate this development and atypicalities in development and relate them to theoretical models of skilled reading and comprehension. The part also deals with developmental reading problems: developmental dyslexia, surface dyslexia, dysgraphia and comprehension deficits - their diagnosis and remediation.
Evaluation Scheme	3 short tests and a final examination

Course Title	**Philosophy Of Language**
Course Code	**LS 392**
Semester	IV
Day / Timings	Monday & Thursday: 2.00 – 4.00 pm
No. of Credits	5
Name of the Faculty Member(s)	Prof. P. Madhavan
Course Description 150/200 words	**TOPICS** 1. Preliminaries – Meaning in Language, denotation, sense and reference (Frege) 2. Truth and falsity, the law of identity and substitution 'salvaveritate' (Leibniz) 3. Russell on Denoting, names and definite descriptions, quantificational logic, the law of excluded middle, meaning of the definite article'the' 4. The prepositional attitudes: Willard Quine, *de dicto* and *de re* readings, ways of referring - referential and attributive, Keith Donnellan 5. Naming and necessity – Saul Kripke, circularity in description, analytic truths and contingent truths, necessary truths - a priori and a posteriori, Putnam 6. Name as rigid designator, kind terms 7. Possible worlds: semantics, context and indexicality 8. Donald Davidson's philosophy of language 9. Early Wittgenstein, *TractatusLogicoPhilosophicus*: picture theory of meaning, ineffability thesis, distinction between saying and showing 10. Later Wittgenstein - meaning as use, language-game, family resemblance
Evaluation Scheme	40= Assignment, 60= Written test.