MA Computational Linguistics – Semester I - Course Descriptions (1 September – 16 December 2023)

Course Title	**Phonetics and Spoken English (core)**
Course Code	**MACL 111**
Semester	I
No. of Credits	4
Days/Timings	Tuesday & Thursday: 9.00 am – 11.00 am
No of Students	30
Name of Faculty Member(s)	Dr. Meena Debashish
Course Description: 150/200 words	This course is designed to introduce the basics of English phonetics, to train students in pronunciation, and to make them aware of the issues of intelligibility, through lecture, tutorial and lab sessions. Some of the topics covered in this course are: the speech mechanism, the respiratory-phonatory-articulatory systems, phoneme vs allophone, the IPA chart, the criteria for description of consonants and vowels (with special focus on English – RP (Received Pronunciation)), phoneme distribution, syllable, word accent, and the prosodic systems of rhythm and intonation.
Evaluation	- Internal Assessment: 40 % (Quizzes/Assignments/Tests) - Final Assessment: 60 %

Course Title	**Basic Issues in Morphology (core)**
Course Code	**MACL 131**
Semester	I
No. of Credits	4
Days/Timings	Monday & Friday: 11.00 am – 1.00 pm
No of students	30
Name of Faculty Member(S)	Prof. Shruti Sircar
Course Descriptions:	The course will examine morphological phenomena from across the world's languages and try to discuss the relationship of morphology to phonology and other areas of grammar, such as syntax and semantics. The course will help learners • to identify the meaningful subparts of words and perform morphological analysis on unfamiliar languages • to understand the major morphological phenomena found in the world's languages • to analyze morphological and phonological patterns in particular languages, and their interactions • to represent morphosyntactic structure diagrammatically, and comprehend the relationship between such structure and meaning
Evaluation Scheme	*Internal (40%)* Two sit down open-book tests, which will be a mixture of multiple choice, problem-solving and short-answer questions One final project based on original work on some morphological aspect of an understudied language *External*: sit down examination (60%)

Course Title	**Basic Issues in Syntax (core)**
Course Code	**MACL 141**
Semester	I
No. of Credits	4
Days/Timings	Wednesday: 11.00 am – 1.00 pm Thursday: 2.00 pm – 4.00 pm
No of students	30
Name of Faculty Member(S)	Prof. P. Madhavan
Course Descriptions:	The course begins by introducing the notion of a phrase, discusses the structure of different phrases, along with the basic properties of phrases. Then, descriptive devices like tree diagrams and labelled bracketing are presented; how phenomena like ambiguity can be handled is illustrated. This is followed by an introduction to the Chomskyan programme in Linguistics, as enunciated in the Government and Binding (GB) model. Though it is English data that are primarily dealt with, data from other languages, in particular Indian languages, are also used as and when necessary. **Objectives and Learning outcome** The course is designed in such a way that the learner, by the time he/she finishes the course, gets a sound understanding of a) the modular structure of Universal Grammar and b) the intricate interaction of the independent modules that outputs all and only sentences of language. The learner is also, in the ideal scenario, not only ready but eager to do the next course in syntax. *Module 1* Phrases and clauses, structure of clauses, constituency tests, PS rules, IC analysis *Module 2* The "mystery" of language acquisition in young children, poverty of stimulus, LAD *Module 3* The Aspects model, the need for multilevel approach to syntax, *Module 4* Universal Grammar, the Principles and Parameters model, projection principle, theta criterion, X-bar theory, case filter, government, PRO and control theory, Binding Principle
Evaluation Scheme	40 % internal & 60 % final Three tests will be given, and the best two performances will be counted for the internal grade. The final exam will be a three-hour sit-down exam.

Course Title	**Introduction to Natural Language Processing (core)**
Course Code	**MACL 181**
Semester	I
No. of Credits	4
Days/Timings	Monday & Wednesday: 9.00 – 11.00 am
Name of Faculty Member(S)	Prof. M. Hari Prasad / Dr. Atreyee Sharma
Course Descriptions:	This course deals with a wide range of topics in natural language processing, including word and sentence tokenization, text classification and sentiment analysis, spelling correction, information extraction, parsing, meaning extraction, and question answering. The course also introduces computational models.
Evaluation Scheme	Home works: Midterm: Final