

MA Computational Linguistics – Semester I - Course Descriptions (1 August – 14 December 2024)

Course title	LANGUAGE AND SOCIETY
Category (Mention the appropriate category (a/b/c) in the course description.)	a. Existing course without changes
Course code	MACLINGE 501
Semester	I
Number of credits	4
Maximum intake	30 (on first-come-first-served-basis)
Day/Time	Tuesday & Thursday: 3.00 – 5.00 pm
Name of the teacher/s	Dr. Smita Joseph
Course description	<p>Include the following in the course description</p> <p>i) A brief overview of the course:</p> <p>The course helps students bridge the gap between an introductory-level and more advanced-level sociolinguistics courses. Most of the sociolinguistic research discussed in the course makes use of examples from English since this is a language familiar to most students. However, since most of the students encounter concepts for the first time, English examples are used in class and through texts, but they are also encouraged to apply the newly acquired concepts in their respective mother tongues. The use of phonetic symbols and technical terms is used minimally.</p> <p>ii) Objectives of the course in terms of Programme Specific Outcomes (PSO of the Programme under which the course is being offered)</p> <p>1. Demonstrate (i) a systematic, thorough, and coherent knowledge and understanding of the relationship between language and society as a whole, as well as its applications and affinities to other disciplinary areas/subjects of study (ii) knowledge of the relationship between language and society and applied linguistics that creates various types of professions (iii) a capacity to apply tried-and-true methods of analysis in the humanities in general and sociolinguistic studies in particular, as well as a critical grasp of recent innovations in sociolinguistic theory. (a, d)</p> <p>2. Demonstrate a thorough understanding of the subject matter. (a)</p> <p>3. Demonstrate expertise in analysing and interpreting data, utilizing humanities-appropriate approaches, and creating logical and fact-based arguments and solutions. (c)</p>

	<p>4. Utilize knowledge, comprehension, and analytical abilities to critically evaluate a variety of concepts as well as intricate topics and problems related to the application of sociolinguistic studies and the study of linguistics. (a, c)</p> <p>5. Apply transferrable skills, knowledge of humanities, and understanding of linguistic and sociolinguistic studies to new or unfamiliar situations in order to recognize, evaluate, and find solutions to problems that arise in daily life. (c)</p> <p>6. Demonstrate language and sociolinguistic competencies and transferrable skills in order to be competitive in various occupational profiles and professions. (b, d)</p> <p>iii) Learning outcomes—a) domain specific outcomes b) value addition c) skill-enhancement d) employability quotient (Please highlight the portion that subscribes to a/b/c/d)</p>
Course delivery	Lecture method
Evaluation scheme	<p>Internal (modes of evaluation): Three internals (MCQs, case study test, written exam = 40%)</p> <p>End-semester (mode of evaluation): Written exam (60%)</p> <p>*Please note that open-book examination is permissible only for courses offered as part of MA programmes and subject to approval by the Head of the Department/Dean of the School concerned</p>
Reading list	<p>Essential reading</p> <p>Holmes, J. (2013). <i>An Introduction to Sociolinguistics</i> (4th ed.) London & New York: Routledge.</p> <p>Additional reading</p> <p>Llamas, C., Mullany, L., & Stockwell, P. (2007). <i>The Routledge companion to sociolinguistics</i>. London & New York: Routledge.</p> <p>Wardhaugh, R. (2006). <i>An introduction to sociolinguistics</i> (5th ed.). U.K.: Blackwell Publishing.</p>

Course title	BASIC ISSUES IN MORPHOLOGY																														
Category (Mention the appropriate category (a/b/c) in the course description.)	b. Existing course without changes																														
Course code	MACLINGC 531																														
Semester	One (Semester 1)																														
Number of credits	4 credits																														
Maximum intake	Compulsory course for MA LING and MACL – 40 intake																														
Day/Time	Wednesday: 3:00 to 5:00; Friday 11:00 to 1:00																														
Name of the teacher/s	Prof. Shruti Sircar																														
Course description	<p>(i) A brief overview of the course What is a word? Do the things we put spaces around when we write correspond to anything in our mental grammars? How does morphology relate to phonology, and to other areas of grammar, such as syntax and semantics? To what extent do the principles governing the structures and forms of words need to be boxed off from other areas of grammar, and to what extent are they symptomatic of deeper principles which hold of the language faculty as a whole? This course aims to answer these and other questions by examining morphological phenomena from across the world's languages, including English and languages which are (at least superficially) very different from it.</p> <p>iv) Objectives of the course in terms of Programme Specific Outcomes (PSO of the Programme under which the course is being offered) Students will be able to</p> <table border="1"> <tr> <td>CO1</td> <td>acquire an understanding of the major morphological phenomena found in the world's languages</td> <td>PO1, PO2</td> <td>domain specific</td> </tr> <tr> <td>CO2</td> <td>learn about the major theoretical issues and approaches used to study morphology</td> <td>PO1, PO2</td> <td>domain specific</td> </tr> <tr> <td>CO3</td> <td>obtain skills to identify the major morphological operations/ processes in natural languages</td> <td>PO5, PO6</td> <td>skill enhancement</td> </tr> <tr> <td>CO4</td> <td>learn to represent morphosyntactic structure diagrammatically</td> <td>PO5, PO6</td> <td>skill enhancement</td> </tr> <tr> <td>CO5</td> <td>learn to represent morpheme-by-morpheme glossing for language data</td> <td>PO7</td> <td>skill enhancement</td> </tr> <tr> <td>CO6</td> <td>Apply concepts and skills learnt to analyze and present morphological patterns in languages</td> <td>PO10</td> <td>skill enhancement</td> </tr> <tr> <td>CO7</td> <td>Provide argumentation to explain morphological phenomena</td> <td>PO11</td> <td>domain specific</td> </tr> </table> <p>v) Learning outcomes— a) domain specific outcomes b) value addition/ c) skill-enhancement/ d) employability quotient</p>			CO1	acquire an understanding of the major morphological phenomena found in the world's languages	PO1, PO2	domain specific	CO2	learn about the major theoretical issues and approaches used to study morphology	PO1, PO2	domain specific	CO3	obtain skills to identify the major morphological operations/ processes in natural languages	PO5, PO6	skill enhancement	CO4	learn to represent morphosyntactic structure diagrammatically	PO5, PO6	skill enhancement	CO5	learn to represent morpheme-by-morpheme glossing for language data	PO7	skill enhancement	CO6	Apply concepts and skills learnt to analyze and present morphological patterns in languages	PO10	skill enhancement	CO7	Provide argumentation to explain morphological phenomena	PO11	domain specific
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	(Please highlight the portion that subscribes to a/b/c/d)
Course delivery	Lecture 50% Data analysis 50%
Evaluation scheme	Internal (modes of evaluation): 2 sit down tests, and an assignment (best 2) – 40% End-semester (mode of evaluation): 1 sit down examination 60% (open book)
Reading list	<p>Essential reading</p> <ol style="list-style-type: none"> 1. Bauer, Laurie. (2003). <i>Introducing Linguistic Morphology</i>. Washington, D.C.: Georgetown University Press. 2. Lieber, Rochelle (2012). <i>Introducing Morphology</i>. Cambridge University Press. <p>Additional reading</p> <ol style="list-style-type: none"> 1. Aronoff, Mark, and Kirsten Fudeman. 2011. <i>What is morphology?</i> 2nd edition. West Sussex, UK: Wiley-Blackwell. 2. Katamba, F. & J.T. Stonham. 2006. <i>Morphology</i>. Palgrave Macmillan. 3. Booij, Geert. 2007 <i>The Grammar of Words. An Introduction to linguistic Morphology</i>. 2nd ed. OUP. 4. Spencer, A. and Zwicky, A. 1998. <i>The Handbook of Morphology</i>. Blackwell. 5. Haspelmath, Martin, and Andrea Sims. (2010). <i>Understanding Morphology</i>. 2nd Edition. London: Hodder Education.

Course Title	Phonetics and Spoken English
Category (Mention the appropriate category (a/b/c) in the course description)	Existing course without changes
Course Code	MACLINGE 511
Semester	1
No. of Credits	4
Maximum intake	No restriction
Day/ Time	Monday: 11.00 am – 12.00 pm 12.00 pm – 1.00 pm (Tutorial) Thursday: 11.00 am – 1.00 pm (lectures)

Name of the teacher/s	Dr. Didla Grace, Prof. Komali Prakash & Dr. Neelam Singh			
Course Description:	A brief overview of the course			
	The course ‘Phonetics and Spoken English’ deals with the essentials of Phonetics such as the Speech Mechanism, description of speech sounds (consonants & vowels), syllable, stress at both word and sentence levels, and prosodic features of the English language, through theoretical classroom sessions, tutorials, and language lab practice sessions. The evaluation is based on theoretical knowledge and its application, and production and perception skills.			
	Students will be able to			
	CO1	Obtain a sound theoretical knowledge of the Phonetics of English	PO3 , PO8	Domain Specific Skill Enhancement
	CO2	Receive thorough training to identify and describe the phonemes of English language	PO2 , PO3	Domain Specific
	CO3	Appreciate the patterns of word accent, sentences rhythm, and intonation (in various contexts) of English (RP) for better appreciation of the language and its efficient use	PO3	Domain Specific
	CO4	Acquire pronunciation skills through the use of English dictionary	PO3 , PO8	Domain Specifics Skill Enhancement
	CO5	Overcome L1 interference and improve the intelligibility of their speech	PO8	Skill Enhancement
CO6	Develop their Spoken English Skills to augment their employability	PO8	Skill Enhancement and Employability	
Course Delivery	Lectures, Tutorials and Language Lab sessions			
Evaluation Scheme	Written examination and oral test			

Course Title	Basic issues in Syntax
Category (Mention the appropriate category (a/b/c) in the course description)	Existing course without changes
Course Code	MACLINGC 541
Semester	1
No. of Credits	4
Maximum intake	As per University stipulations, if any
Day/ Time	Monday & Wednesday: 11.00 am – 1.00 pm
Name of the teacher/s	Dr. Anish Koshy
Course Description:	<p>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.</p> <p>Objectives and Learning outcome</p> <p>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.</p> <p><i>Module 1</i> Phrases and clauses, structure of clauses, constituency tests, PS rules, IC analysis</p> <p><i>Module 2</i> The “mystery” of language acquisition in young children, poverty of stimulus, LAD</p> <p><i>Module 3</i> The Aspects model, the need for multilevel approach to syntax,</p> <p><i>Module 4</i> Universal Grammar, the Principles and Parameters model, projection principle, theta criterion, X-bar theory, case filter, government, PRO and control theory, Binding Principle</p>

Course Delivery	Lecture mode with exercises and assignments for self-learning
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.
Reading List	<p>Bickerton, D., & Szathmáry, E. (Eds.). (2009). <i>Biological foundations and origin of syntax</i> (Vol. 3). Mit Press.</p> <p>Carnie, A. (2009). <i>Constituent Structure</i>. United Kingdom: OUP Oxford.</p> <p>Carnie, A. (2021). <i>Syntax: A generative introduction</i>. John Wiley & Sons.</p> <p>Miller, J. (2016). <i>Introduction to English Syntax</i>. Germany: Edinburgh University Press.</p> <p>Rauh, G. (2010). <i>Syntactic Categories: Their Identification and Description in Linguistic Theories</i>. United Kingdom: OUP Oxford.</p> <p>Van Valin, R. D. (2001). <i>An Introduction to Syntax</i>. United Kingdom: Cambridge University Press.</p> <p><i>Apart from these some primary texts and articles may be given for presentations and readings</i></p>

Course title	Introduction To Natural Language Processing
Category (Mention the appropriate category (a/b/c) in the course description.)	a. Existing course without changes
Course code	MACLINGC 581
Semester	First
Number of credits	4
Maximum intake	30 (on first-come-first-served-basis for MA courses only)
Day/Time	Monday and Thursday 3-5pm
Name of the teacher/s	Dr. Atreyee Sharma
Course description	<p>(i)The course presents an overview of the different areas and applications of Computational Linguistics. It deals with a wide range of topics in NLP (Natural Language Processing). There are introductory concepts introduced about What is NLP, Computational Morphology, Computational Phonology, Morphological and Shallow Parsers, and a few basics concepts on Regular Expressions- how to use RegEx and write simple code.</p> <p>(ii) To understand the basic concept of NLP, how it is related to AI and Computational Linguistics. History of NLP, stages of development in the field of computational linguistics and its relation to the bigger research areas like AI and Language Computation. To understand and introduce Computational Morphology and Phonology, basic theories of both morphology and phonology to relate to computation. To understand how computational morphology is related to parsing and information retrieval and machine translation later. How do transducers and FSA solve the problem of large scale morphological and phonological analysis and generation.</p> <p>(iii) Students will gain an understanding of the fact that through the offering of several basic and advanced courses in Computational Linguistics, it will allow us to bridge the gap that will integrate computer science and linguistic-theoretical approaches to NLP. Students will understand the fact that in the past two decades, research in Computational Linguistics has seen remarkable growth, both in terms of coverage of the many languages in India and advancement in scientific practice. By exposing them to the basic concepts in CL, students will also be able to identify theoretical approaches that lead to produce such advancement in CL.</p>
Course delivery	Lectures
Evaluation scheme	Internal (modes of evaluation): Assignment and test (40 marks) End-semester (mode of evaluation): Written test (60 marks)
Reading list	ESSENTIAL READING: Study material will be provided on all topics. These would be based primarily on content from the following

texts:

- Speech and Language Processing: An Introduction to Natural Language Processing, Computational Linguistics and Speech Recognition (3rd Edition)

Book by Daniel Jurafsky and James H. Martin 2021

- Agresti, A. (2002). Categorical data analysis. Hoboken, NJ: Wiley
- Miller, G. A. and Chomsky, N. (1963). Finitary models of language users. In Luce, R. D., Bush, R. R., and Galanter, E. (Eds.), Handbook of Mathematical Psychology,
- Source Book for Linguistics

Book by William Cowan, Jaromira Rakušan 1987

ADDITIONAL READING:

Austin, J. L. (1962). How to do things with words. Oxford University Press

Baldwin, T. and S. N. Kim (2010). Multiword expressions. In Handbook of natural language processing, Volume 2. Boca Raton, USA: CRC Press.

Bobrow, D. G., R. M. Kaplan, M. Kay, D. A. Norman, H. Thompson, and T. Winograd (1977). Gus, a frame-driven dialog system. Artificial intelligence 8(2), 155–173

Botha, J. A. and P. Blunsom (2014). Compositional morphology for word representations and language modelling. See icm (2014).

Creutz, M. and K. Lagus (2007). Unsupervised models for morpheme segmentation and morphology learning. ACM Transactions on Speech and Language Processing (TSLP) 4(1), 3

Dreyfus, H. L. (1992). What computers still can't do: a critique of artificial reason. MIT press.

Haspelmath, M. and A. Sims (2013). Understanding morphology. Routledge.

Jurafsky, D. and J. H. Martin (2019). Speech and Language Processing (Third ed.). Prentice Hall.