MA Computational Linguistics – Semester I - Course Descriptions (1 August – 3 December 2025)

<table>
<tr><td>Course Title</td><td>Phonetics and Spoken English</td></tr>
<tr><td>Category (Mention the appropriate category (a/b/c) in the course description</td><td>Existing course without changes</td></tr>
<tr><td>Course Code</td><td>MACLINGE 411</td></tr>
<tr><td>Semester</td><td>I</td></tr>
<tr><td>No. of Credits</td><td>4</td></tr>
<tr><td>Maximum intake</td><td>30 – 35</td></tr>
<tr><td>Day/ Time</td><td>Tuesday: 2.00 – 4.00 pm
Thursday: 11.00 am – 1.00 pm</td></tr>
<tr><td>Name of the teacher/s</td><td>Dr. Didla Grace Suneetha</td></tr>
<tr><td>Course Description:</td><td>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
<table>
<tr><td>CO1</td><td>Obtain a sound theoretical knowledge of the Phonetics of English</td><td>PO3,

PO8</td><td>Domain Specific

Skill Enhancement</td></tr>
<tr><td>CO2</td><td>Receive thorough training to identify and describe the phonemes of English language</td><td>PO2, PO3</td><td>Domain Specific</td></tr>
<tr><td>CO3</td><td>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</td><td>PO3</td><td>Domain Specific</td></tr>
<tr><td>CO4</td><td>Acquire pronunciation skills through the use of English dictionary</td><td>PO3,

PO8</td><td>Domain Specifics

Skill Enhancement</td></tr>
<tr><td>CO5</td><td>Overcome L1 interference and improve the intelligibility of their speech</td><td>PO8</td><td>Skill Enhancement</td></tr>
<tr><td>CO6</td><td>Develop their Spoken English Skills to augment their employability</td><td>PO8</td><td>Skill Enhancement and Employability</td></tr>
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Course Delivery	Lectures, Tutorials and Language Lab sessions
Evaluation Scheme	Written examination and oral test
Reading List	**Prescribed Readings:** 1. Gimson, A.C. 2008. Gimson's Pronunciation of English, 7 th ed. Revised by A Cruttenden. London: Hodder Education. 2. Roach, P. 2009. English Phonetics and Phonology: A Practical Course, 4 th ed. Cambridge: Cambridge University Press. **Dictionary:** 1. Jones, D. 2011. Cambridge English Pronouncing Dictionary, 18 th ed. Cambridge: Cambridge University Press.

<table>
<tr><td>Course title</td><td>BASIC ISSUES IN MORPHOLOGY</td></tr>
<tr><td>Category (Mention the appropriate category (a/b/c) in the course description.)</td><td>a. Existing course without changes</td></tr>
<tr><td>Course code</td><td>MACLINGC 431</td></tr>
<tr><td>Semester</td><td>I</td></tr>
<tr><td>Number of credits</td><td>4 credits</td></tr>
<tr><td>Maximum intake</td><td>Compulsory course for MA LING, MACL, MA Cafeteria & BA 4th Sem – 60 intake</td></tr>
<tr><td>Day/Time</td><td>Tuesday: 11.00 am – 1.00 pm
Wednesday: 9:00 am to 11:00 pm</td></tr>
<tr><td>Name of the teacher/s</td><td>Prof. Shruti Sircar</td></tr>
<tr><td>Course description</td><td>(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.

i) 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

<table>
<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>
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ii) 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)</td></tr>
<tr><td>Course delivery</td><td>Lecture 50%
Data analysis 50%</td></tr>
<tr><td>Evaluation scheme</td><td>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)</td></tr>
<tr><td>Reading list</td><td>Essential reading</td></tr>
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	1. Bauer, Laurie. (2003). Introducing Linguistic Morphology. Washington, D.C.: Georgetown University Press. 2. Lieber, Rochelle (2012). Introducing Morphology. Cambridge University Press. Additional reading 1. Aronoff, Mark, and Kirsten Fudeman. 2011. What is morphology? 2nd edition. West Sussex, UK: Wiley-Blackwell. 2. Katamba, F. & J.T. Stonham. 2006. *Morphology*. Palgrave Macmillan. 3. Booij, Geert. 2007 *The Grammar of Words. An Introduction to linguistic Morphology*. 2nd ed. OUP. 4. Spencer, A. and Zwicky, A. 1998. *The Handbook of Morphology*. Blackwell. 5. Haspelmath, Martin, and Andrea Sims. (2010). Understanding Morphology. 2nd Edition. London: Hodder Education.

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 441**
Semester	I
No. of Credits	4
Maximum intake	Compulsory course for MA LING, MACL, MA Cafeteria & BA 4th Sem – 6**0 intake**
Day/ Time	Monday: 4.00 – 6.00 pm Wednesday: 11.00 am – 1.00 pm
Name of the teacher/s	Dr. Anish Koshy & Dr.K.J. Gouthaman
Course Description:	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 Chomskyanprogramme 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
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	Bickerton, D., &Szathmáry, E. (Eds.). (2009). *Biological foundations and origin of syntax* (Vol. 3). Mit Press. Carnie, A. (2009). *ConstituentStructure*. United Kingdom: OUP Oxford. Carnie, A. (2021). *Syntax: A generative introduction*. John Wiley & Sons. Miller, J. (2016). *Introduction to English Syntax*. Germany: Edinburgh University Press. Rauh, G. (2010). *Syntactic Categories: Their Identification and Description in Linguistic Theories*. United Kingdom: OUP Oxford. Van Valin, R. D. (2001). *An Introduction to Syntax*. United Kingdom: Cambridge University Press. *Apart from these some primary texts and articles may be given for presentations and readings*

<table>
<tr><td>Course title</td><td>Introduction to Systemic Functional Linguistics</td></tr>
<tr><td>Category (Mention the appropriate category (a/b/c) in the course description.)</td><td>a. Existing course without changes</td></tr>
<tr><td>Course code</td><td>MACLINGE 516</td></tr>
<tr><td>Semester</td><td>I</td></tr>
<tr><td>Number of credits</td><td>4</td></tr>
<tr><td>Maximum intake</td><td>30</td></tr>
<tr><td>Day/Time</td><td>Monday: 11.00 am – 1.00 pm
Thursday: 2.00 pm- 4.00 pm</td></tr>
<tr><td>Name of the teacher/s</td><td>Dr. Meena Debashish</td></tr>
<tr><td>Course description</td><td>
A brief overview of the course
This course introduces the Systemic Functional Linguistic Theory, a social semiotic theory of language, which focuses on the function ‘meaning in context’ aspect of language, and its ‘appliability’. Therefore, the course is designed to study the systems of meaning (experiential, interpersonal, and textual) at different strata of language, and how one system relates to the other to get a trinocular perspective of language.

We will be looking at the grammar of English in terms of patterns and functions, and working with the grammar of whole texts in contexts with the help of the UAM Corpus Tool (text annotation). At the end of the course, the aim is to acquire a working knowledge of the systemic functional theory for the analysis of texts not just in English but other languages as well.

Objectives of the course (COs) in terms of Programme Specific Outcomes(PSOs)
Learning outcomes (LOs) —a) domain-specific outcomes b) value addition/ c) skill-enhancement/d) employability quotient
At the end of the course, students will

<table>
<tr><td></td><td>COs</td><td>PSOs</td><td>LOs</td></tr>
<tr><td>CO1</td><td>acquire a theoretical understanding of Systemic Functional Linguistics</td><td>PSO1
PSO2</td><td>domain Specific</td></tr>
<tr><td>CO2</td><td>learn to adopt a trinocular perspective to study spoken English texts in various contexts of situations</td><td>PSO5
PSO6</td><td>skill enhancement</td></tr>
<tr><td>CO3</td><td>acquire the systemic functional expertise to study/use the meaning making systems of English language</td><td>PSO5
PSO6
PSO7</td><td>skill enhancement</td></tr>
<tr><td>CO4</td><td>learn to use the UAM Corpus tool to study/run experiments</td><td>PSO5
PSO6
PSO7</td><td>skill enhancement</td></tr>
<tr><td>CO5</td><td>be able to identify their needs as L2 users of English and address them</td><td>PSO8
PSO12
PSO15</td><td>skill enhancement; value addition; employability quotient</td></tr>
<tr><td>CO6</td><td>acquire the necessary skills for making effective choices in experiential, textual and interpersonal meanings in written and spoken texts, and thereby become confident, and efficient users/speakers of English</td><td>PSO8
PSO12
PSO15</td><td>skill enhancement; value addition; employability quotient</td></tr>
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<tr><td>Course delivery</td><td>1. Lecture 50%</td></tr>
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	Experiential learning 50%: tutorial sessions – working with UAM Corpus Tool
Evaluation scheme	**Internal (modes of evaluation):50%** 1. Sit-down test 2. Practical test **End-semester (mode of evaluation):50%** 1. Sit-down Exam/Term paper (Written+Practical)
Reading list	**Essential reading** 1. Butt, D, Fahey R, Feez S, Spinks, S, & C Yallop. (2000).*Using Functional Grammar: An Explorer's Guide, 2nd ed*. Sydney: Macquarie University. 2. Eggins, S.& D. Slade. (1997). *Analyzing Casual Conversation*.New York: Continuum. 3. Halliday, M.A.K. (2014). *Halliday's Introduction to Functional Grammar, 4th ed (Revised by Christian M.I.M. Matthiessen.* London: Routledge. **Software:** 1. UAM Corpus Tool, Version 2.4.2. Mick O' Donnell 2007

Course Title	**MACLINGE 571**
Category (Mention the appropriate category (a/b/c) in the course description	Existing course without changes
Course Code	**Introduction to Mathematical Linguistics**
Semester	Semester I
No. of Credits	4
Maximum intake	50
Day/ Time	Tuesday & Thursday: 4.00 – 6.00 pm
Name of the teacher/s	Dr. Utpal Lahiri
Course Description:	Set theory, Propositional logic, Relations and Functions, Predicate Calculus, Modal Logic, Algebraic Structures (Orders, lattices, Boolean Algebras). Textbook: Partee, B., R. Wall and A. Ter Meulen (1990). Mathematical Methods in Linguistics. Springer.
Course Delivery	Lecture
Evaluation Scheme	Internals (40%), Final (60%)
Reading List	

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	I
Number of credits	4
Maximum intake	40
Day/Time	Monday and Wednesday: 2.00 pm – 4.00 pm
Name of the teacher/s	Prof. M. Hari Prasad & Dr. Atreyee Sharma
Course description	(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. (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. (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.
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 oflanguage 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.