Dept. of Linguistics
K.M. Institute of Hindi and Linguistics
Dr. B.R. Ambedkar University, Agra

Programme: M.A. (Linguistics)

Overview:

The purpose of M.A. programme in Linguistics is to acquaint the students with the theoretical aspects of the extremely fascinating area of Language Sciences and train them for research in this field of the study of natural languages. This course outline is prepared keeping in view that the students should have a sound background in different theoretical and methodological orientations of the field. At the same time, Linguistics being an empirical science, they should be well-equipped to look at and analyse the naturally occurring data and contribute to the ongoing research. Thus every course will include theoretical discussions as well as practical training for data analysis.

The programme is designed in such a way that the compulsory courses introduce the students to a wide range of areas and methodologies in which linguists work and the optional courses provide a more in-depth study of these areas. Thus, while being aware of different orientations in the field, the student could select areas of their interest for a more in-depth knowledge in that area through the optional courses.

The breakout of compulsory and optional courses are given below.

Semester	Compulsory Courses	Optional Courses
1	4	0
2	3	4 (Any 1)
3	3	6 (Any 1)
4	2	10 (Any 2)

The course outlines are designed in such a way that it gives the instructors some flexibility in including the recent developments in the area. Thus instead of giving a full, comprehensive list of things to be covered, a list of broad areas that could be included in the course is given. Having said that, we also think that the course outline should be continuously updated to keep the students abreast with the latest developments in the area (and as is also recommended in the 'model curriculum' programme of UGC). So this outline must be continuously revised and updated (every semester the course is offered) for the M.A. programme to remain relevant. And this revision does not enatail just the revision of the course content of individual courses but also the revision of the courses that are being offered and possible additions of the new, innovative and relevant optional/compulsory courses.

Except where mentioned otherwise the evaluation will consist of one written exam of 100 marks. Out of these, the break-up of marks would be as follows
Data Analysis – 50%
Theoretical Questions (Both short answer and long answer types and objective questions) – 50%

For the 'Field Methods and Language Documentation' course, the evaluation pattern would be
Presentation - 50%
M.A. Dissertation - 50%

For the 'Corpus Linguistics and Quantitative Methods' course, the evaluation pattern would be
Corpus Collection - 30%
Corpus analysis and report writing - 40%
Presentation – 30%

For the 'Computational Linguistics Course', the evaluation pattern would be
Application Development – 40%
A theoretical research-oriented project – 40%
Presentation – 20%

For the Seminar course, the evaluation pattern could be decided by the Course Instructor, depending on the requirements of the course.

The list of courses is given below. It must be mentioned here that all the optional course may not be offered each semester. But depending on the interest of the students and the availability of the faculty members, some (or all) of these optional courses would be offered.

Semester – 1
Compulsory Courses
Introducing Language Sciences (C-1.1)
Introducing Phonetics and Phonology (C-1.2)
Introducing Morphological Analysis (C-1.3)
Sociolinguistics (C-1.4)

Semester – 2
Compulsory Courses
Corpus Linguistics and Quantitative Methods in Linguistics (C-2.1)
Generative Syntax - 1 (C-2.2)
Introducing Semantics (C-2.3)

Optional Courses (Select 1)
Biolinguistics (O-2.1)
Theories in Linguistics (O-2.2)
Semiotics (O-2.3)
Linguistic Typology (O-2.4)

Semester - 3
Compulsory Courses
Computational Linguistics (C-3.1)
Historical Linguistics (C-3.2)
Phonological Analysis (C-3.3)

Optional Courses (Select 1)
Generative Syntax - 2 (O-3.1)
Logic and Natural Language Semantics (O-3.2)

Language Learning and Language Pedagogy (O-3.3)
Grammatical Frameworks in NLP (O-3.4)
Acoustics and Experimental Phonetics (O-3.5)
Structures of Languages (O-3.6)

Semester – 4

Compulsory Courses

Field Methods and Language Documentation (C-4.1)
Neurolinguistics and Language Disorders (C-4.2)

Optional Courses (Select 2)

Endangered languages. Issues and Perspectives(O-4.1)
Pragmatics (O-4.2)
Areal Linguistics (C-4.3)
Hybrid Systems in NLP (O-4.4)
Experimental Psycholinguistics (O-4.5)
Language Politics and Planning in India (O-4.6)
Computational Lexicography (O-4.7)
Conversation Analysis and Discourse Analysis (O-4.8)
Translation theory and Machine Translation (O-4.9)
Seminar (O-4.10)

Semester – 1

Compulsory Courses

Introducing Language Sciences

OBJECTIVE: The course introduces students to the basics of Linguistics. It quashes many myths about language and gives a fair idea of the areas that modern linguistics addresses to. At the end of the course students are expected to have
a. An overview of the field of Language Sciences/Linguistics as it stands today
b. An ability to answer questions like "how many languages do you know", "do you know all the languages", "linguistics of which language" and "what exactly you do in Linguistics"

Some of the issues to be discussed include:
a. What is language?, Relationship between brain and language, An Introduction to Human brain, Development of language, Biological encoding of language, how we differ from other species
b. What is language sciences/linguistics?, Descriptive vs. Prescriptive, Linguistic sign
c. Core and Interface domains of Linguistics, Tools and Methodology
d. A basic introduction to phonology, morphology, syntax and semantics
e. Linguistic Knowledge, LAD, Acquisition of Language
f. What are language universals, what is the connection between linguistic diversity and biodiversity, Language contact, Endangered languages and language death
g. Language in Society, Language and Politics
h. Language and Computers

Basic Readings:
1. Fromkin, Victoria, Robert Rodman and Nina Hyams. 2011. An Introduction to Language. Singapore: Wadsworth
2. O'Grady, William and Michael Dobrovolsky. 1989. Contemporary Linguistics: An Introduction. New York: St. Martin Papers

Other readings should be given as is considered necessary and appropriate during the course

---

Introducing Phonetics and Phonology

OBJECTIVE: The course aims at introducing the basic principles and tenets of General Phonetics and Phonology. The later half of the course will be concerned with the function, behaviour and organization of sounds of linguistics units. At the end of the students are expected to have
a. An understanding of the crucial theoretical issues concerning phonetics and phonology,
b. A practical ability to recognise, transcribe, and reproduce speech sounds.
c. A practical ability to write simple phonological rules and solve simple phonological problems.

Some of the broad areas to be discussed during the course include:
a. Inroduction to Phonetics and Phonology
b. Anatomy and physiology of speech, air stream mechanism
c. Articulatory Phonetics, Speech Sound classification, Consonants and Vowels, place and manner of articultaion, three term labels
d. Phonetic Transcription and IPA
e. Multiple articulation and co-articultaion

f. Acoustic phonetics, Suprasegmentals
g. Distinctive Features
h. Phonemic Analysis, Phonological Alternations, processes and rules

Basic Readings:
1. Davenport, Mike and S.J. Hannahs. 2005. Introducing Phonetics and Phonology. Great Britain: Hodder Arnold

Other readings should be given as is considered necessary and appropriate during the course

---

Introducing Morphological Analysis

OBJECTIVE: This course is designed to introduce the students to the basic theories of morphology. It gives an overview of different approaches to doing morphology and how exactly morphological analysis could be carried out. At the end of the course the students are expected to have
a. An understanding of the current theories of morphology
b. A practical ability to carry out the morphological analysis in any language

The following broad areas may be discussed during the course:
a. Language design and morphology.
b. Identification of morphemes, morphological structure and its analysis
c. Word formation processes, Inflection and Derivation
d. Item-and-arrangement, Item-and-process
e. Prosodic Morphology and Morphology-phonology Interface
f. Morphology-syntax Interface
g. Morphology-semantics Interface
h. Morphology and mind Interface

Basic Readings:
1. Aronoff, Mark and Kirsten Fudeman. 2011. What is Morphology?. UK: Wiley-Blackwell
2. Lieber, Rochelle. 2009. Introducing Morphology. Cambridge: Cambridge University Press
3. Booij, Geert. 2007. The grammar of words An Introduction to Morphology. Oxford: Oxford University Press

Additional readings should be given for better understanding of the subject matter.

Sociolinguistics

OBJECTIVE: The course introduces the students to the fundamentals of the interaction of language and society. It gives an overview of both the effects of sociological factors on human language and different aspects related to language in the society. At the end of the course the students are expected to have
a. An understanding of the way language and society interacts with each other.
b. A practical abillity to carry out sociolinguistic surveys and investigations

The following broad areas are expected to be covered during the course:
a. Interaction between language, society and culture; Sapir-Whorf Hypothesis.
b. Variationist Approaches to Sociolinguistics; Labovian Studies and Methodology; Variation,

Variables, Variant Forms. (Chapter 6, 7, 8 – Wardhaugh) (Chapter 2, 3, 4 – Mesthrie) (Chapter 2 - Meyerhoff)
c. Variation in Language; Dialects; Registers; Idiolects and Diglossia (Chapter 2 n 4 – Wardhaugh) (Chapter 2, 3 - Meyerhoff)
d. Stereotypes, Markers and Indicators (Chapter 2 - Meyerhoff)
e. Interactional Sociolinguistics; Turn taking; Silence; Politeness Studies and Slangs (Chapter 9, 10, 11 – Wardhaugh) (Chapter 6 – Mesthrie) (Chapter 5 - Meyerhoff)
f. Social Networks (Chapter 3 – Wardhaugh) (Chapter 9 - Meyerhoff)
g. Bilingualism and Multilingualism (Chapter 4 – Wardhaugh) (Chapter 5 – Mesthrie) (Chapter 6 - Meyerhoff)
h. Language Contact; Pidgins and Creoles; Linguistic Diversity; Language Shift, maintenance and death (Chapter 5 – Wardhaugh) (Chapter 8, 9 – Mesthrie) (Chapter 11 - Meyerhoff)
i. Politics of Standardization and Dialects (Chapter 13 n 14 – Wardhaugh) (Chapter 11, 12 - Mesthrie)
j. Language Attitude (Chapter 4 – Wardhaugh) (Chapter 4- Meyerhoff)
k. Language, Gender and Sexuality (Chapter 12 – Wardhaugh) (Chapter 7 – Mesthrie) (Chapter 10 - Meyerhoff)

Basic Readings:

1. Mesthrie, Rajend, Joan Swann, Ana Deumert & William L. Leap (2009). Introducing Sociolinguistics. Edinburgh: Edinburgh University Press.
2. Meyerhoff, Miriam (2006). Introducing Sociolinguistics. New York: Routledge.

Further readings should be given as and when required.

Semester - 2

Compulsory Papers

Corpus Linguistics and Quantitative Methods in Linguistics

OBJECTIVE: The main objective of this course is to introduce the students to the methods and practices of collecting, storing and analysing corpora of different kinds. It is a practical course in which the students would be required to collect and store a corpus in a language of their choice using some of the automatic means taught during the course. Furthermore they would be required to work on one of the theoretical aspects of the language using the quantitative methods on the corpus. At the end of the course the students will have
a. An understanding of different kinds of corpora that could be collected and different quantitative methodologies for analysing a corpus
b. An ability to create and analyse corpus for their own research

The major areas to be covered during the course include
a. History and develoment of corpus linguistics
b. Different kinds of corpora and their usage
c. Methods of collecting corpus
d. Web as a corpus
e. Introduction to XML and RDBMS (using one of the database management systems like mysql, MS-SQL server, Oracle, etc.)
e. Introduction to basic descriptive statisics and different tests of significance

f. Practical experience with R

Basic Readings:

1. O'Keeffe, Anne and Michael McCarthy. 2010. The Routledge Handbook of Corpus Linguistics. London: Routledge
2. Gries, Stefan Thomas. 2009. Quantitative Corpus Linguistics With R : a Practical Introduction. London: Routledge
3. Butler, Christopher. 1985. Statistics in Linguistics. UK: Basil Blackwell

Additional readings should be given to the students to further facilitate and help in the process of corpus creation and analysis.

Generative Syntax – 1

OBJECTIVE: The aim of this course is to introduce the students to the basics of generative syntax, starting with the phrase structure to the GB theory. It will give a brief overview of the development of the theory from phrase structure to principles & parameters (P & P) approach and Government and Binding Theory through TG Grammar. A major part of the course will be devoted to the understanding of the basic principles and tenets of the GB theory and their application in understanding the structures of a language. At the end of the course the students are expected to have
a. A thorough understanding of the theoretical aspects of Generative Syntax, especially GB theory
b. The skill to analyse and explain syntactic properties of a language.

The broad topics to be covered during the course include:
a. Introduction to Generative Grammar
b. Parts of Speech
c. Constituency, Trees and Rules
d. Structural Relations
e. Binding Theory
f. X-bar Theory
g. Extending X-bar Theory to Functional Categories
h. Constraining X-bar Theory: The Lexicon
i. Head-to-Head Movement
j. DP Movement
k. Wh-movement
l. A Unified Theory of Movement
m. Expanded VPs
n. Raising, Control and Empty Categories

Basic Readings:

1. Carnie, Andrew. 2002. Syntax: A Generative Introduction. Oxford: Blackwell

Additional readings should be given for better understanding of the subject matter.

Introducing Semantics

OBJECTIVE: This course is designed to introduce the students to the basic theoretical and descriptive concepts and tools for the semantic analysis of natural languages. It will give an overview of lexical and sentential semantics and the application of lexical semantics in Natural Language Processing. At

the end of the course the students are expected to have
a. An understanding of different concepts related to the meaning in natural languages and its use in NLP.
b. An ability to carry out basic semantic analysis of natural languages.
The following topics are expected to be covered during the course:
a. Desiderata for a theory of meaning
b. Meaning, thought and reality
c. Word meaning, sense relations
d. Events and participants
e. Sentence meaning and truth, logical relations
f. Meaning and Computers, WordNets and VerbNets

Basic Readings:
1. Saeed, John. 2003. Semantics. London: Blackwell Publishing

Additional readings should be given for better understanding of the subject matter.

Optional Papers (Select any 1)

Biolinguistics

OBJECTIVE: The course introduces the students to the relationship between human language and human brain. It gives a detailed overview of the relationship between language and brain, starting with the earliest period of the evolution of the modern homo sapiens brain and human language to the acquisition of language in children. At the end of the course the students are expected have
a. A clear understanding of how the human brain and language evolved?
b. A clear understanding of how the children acquire language?
c. A practical ability to carry out longitudinal and latitudinal studies in the area of Child Language Acquisition.

The following broad areas are expected to be covered during the course:
a. The evolution of human brain (from Neandrathals to the modern Humans)
b. The origin and evolution of human language.
c. Knowledge and Use of Human Language
d. Acquisition of language; stages of language acquisition
e. Process and Mechanisms of language acquisition
f. Acquisition of phonology, syntax and semantics

Basic Readings:
1. Jenkins, Lyle. 2000. Biolinguistics Exploring the Biology of Language. Cambridge: Cambridge University Press
2. Lust, Barbara. 2006. Child Language Acquisition and Growth. Cambridge: Cambridge University Press

Further readings should be give as and when required.

Theories in Linguistics

OBJECTIVE: The aim of this course is to introduce the students to some of the theoretical stands in Linguistics which have not been explored elsewhere. It gives an overview of these theories vis-a-vis other major theories, taking the treatment of some of the syntactic categories as case studies. At the end of the course the students are expected to have
a. An understanding of different theoretical positions in linguistics
b. An ability to take an informed stand with relation to different theories.

The following theories are expected to be covered during the course:
a. Pre-Structuralism
b. American Structuralism
c. Syntactic Categories in Generative Grammar
d. Syntactic Categories in LFG and HPSG
e. Syntactic Categories in Cognitive Grammar
f. Syntactic Categories in Role and Reference Grammar

Basic Readings:
Rauh, Gisa. 2010. Syntactic Categories: Their Identification and Description in Linguistic Theories. Oxford: Oxford University Press

Additional readings should be given to the students for further exposition of the theoretical stands.

Semiotics

OBJECTIVE: The objective of this course is to introduce the students to the philosophical concept of language as a sign. It will give an overview of the way language is understood by different philosophers of language. At the end of the course the students are expected to have
a. An understanding of the point of view of different philosophers on the function and structure of language as a sign system.
b. An ability to take one's own position and make informed and critical judgements in the debates on the nature of language.

The following ideas are expected to be covered during the course:
a. Introduction to Semiotics - Langue and Parole
b. Models of the Sign - Saussure, Pierce and Hjemslev
c. Signs and Things - Referentiality and Modality
d. Analysing structures - Syntagmatic and Paradigmatic relations
e. Non-literal aspects of communication
f. Types of Code
g. Text Semiotics
h. Structuralism in Semiotics
i. Post-structuralism in Semiotics

Basic Readings:
1. Noth, Winfried. 1990. Handbook of Semiotics. Indiana University Press.
2. Chandler, David. 2007. Semiotics the Basics. London: Routledge.

Further readings should be given to the students as required

Linguistic Typology

OBJECTIVE: The aim of this course is to introduce the students to the methodology of typological studies in Linguistics with specific focus on Indian languages. At the end of the course the students are expected to have
a. An understanding of terminologies and methodologies in Linguistic Typology
b. A practical ability to carry out the typological studies and draw semantic maps

The following broad areas are expected to be covered during the course:
a. What is typology and areal linguistics?
b. Typological data and methodology, Construction of databases for typological studies
c. Typological Classification
d. Language Universals in Typology
e. Typological markedness, economy and iconicity
f. Grammatical Hierarchies and Semantic Maps
g. Prototype Theory and Typology

Basic Readings:
1. Croft, William. 2003. Typology and Universals. Cambridge: Cambridge University Press.
2. Haspelmath, Martin. 2003. The geometry of grammatical meaning: semantic maps and cross-linguistic comparison. In M. Tomasello (ed.), The new psychology of language, vol. 2, New York: Erlbaum, 211-243.
3. Comrie, Bernard. 1989. Language Universals and Linguistic Typology. Chicago: The University of Chicago Press
4. Abbi, Anvita. 1994. *Semantic Universals in Indian languages*. IIAS, Simla.
5. Haspelmath and others edited *World Atlas of Language Structures (WALS)*. Oxford. Use the online version http://wals.info/

Further readings should be given to the students as required

Semester – 3

Compulsory Papers

Computational Linguistics

OBJECTIVE: This course is intended to introduce the students to the extremely fascinating and challenging field of Computational Linguistics (COLING)/Natural Language Processing (NLP). It will give an overview of both the questions and solutions in achieving the desired goals. At the end of the course students are expected to have
a. An awareness about the current issues and the state-of-the-art in Computational Linguistics
b. An overview of the different methodologies and the goals of Computational Linguistics
c. A practical ability to carry out some of the basic text processing operations using Java/JSP as the programming language.

The following broad areas are expected to be covered during the course:
a. What is COLING/NLP?
b. Approaches to Computational Linguistics, Machine Learning vs. Rule-based, Machine Learning and Rule-based – Hybrid Systems

c. Basic Need – Language Resources, Corpus
d. Language Analysis, POS Tagging of the Data (Hands-on Experience of Tagging the Corpora), Morphological Analysers, Syntactic Parsers, Discourse Parsers, Dialog Act annotation and parsing
e. Language Generation, Morphological Generators, sentence generators, text planning and realization, speech technology, Eliza – the talking computer.
f. Programming for Computational Linguistics, HTML, Java and JSP

Basic Readings:
1. Liang, Daniel Y. (2010). Introduction to Java Programming, 7e. Pearson Education.
2. Mitkov, Ruslan (ed.). (2003). The Oxford Handbook of Computational Linguistics. OUP.
3. Jurafsky, Daniel & James H. Martin. (2009). Speech and Language Processing: An Introduction to Natural Language Processing, Computational Linguistics and Speech Recognition, 2e. Prentice-Hall.

Further readings should be given to the students as required

Historical Linguistics

OBJECTIVE: The aim of this course is to introduce the students with the methods of historical analysis of languages beginning from the earlier manual reconstruction of language families to the modern computational methods of recreating proto-languages. At the end of the course the students are expected to have acquired the following skills:
a. The ability to read and understand the standard literature on historical linguistics
b. The ability to carry out some basic historical analysis of their own languages using the methods discussed during the course.

The following broad topics are expected to be covered during the course.
A. What do we mean by Historical Linguistics?
B. Models of Linguistic Change; External and Internal Change
C. Sound Change; Types of Sound Change; NeoGrammarian and Generativist Approaches to Sound Change
D. Analogical Change; Relation between Sound Change and Analogical Change; Analogical Models
E. Semantic and Lexical Change; Borrowing
F. Syntactic Change
G. Linguistic Reconstruction; Internal Reconstruction; Comparative Reconstruction
H. Language Families; Indo-European Language Family; How to draw Language Trees; Glottochronology (Lexicostatistics)
I. Computational Methods of Linguistic Reconstruction; Using Machine Learning Techniques for reconstruction
J. Limitations and Challenges of Historical Linguistics

Basic Readings:
1. Brian D. Joseph, Richard D. Janda (eds.) 2003. The Handbook of Historical Linguistics. Oxford: Blackwell.
2. Campbell, Lyle. 2004. Historical Linguistics: An Introduction. Massachusetts: MIT Press.
3. Hock, H. 1988. Principles of Historical Linguistics. Mouton de Gruyter.
4. Niyogi, Partha. 2009. The Computational Nature of Language Learning and Evolution. Massachusetts: MIT Press.

Additional papers and books should be given to the students to keep them updated about the recent developments in the field.

Phonological Analysis

OBJECTIVE: The aim of this course is introduce the students to different theories and methodologies of phonological analysis. It also acquaints the students with the practical aspects of phonological analysis, with special focus on Indian languages. At the end of the course, students are expected to have
a. A theoretical understanding of the way phonological structure is understood and dealt with in different theories.
b. A practical ability to carry out the phonological analyses of different languages

This course would cover the following theories of phonological analysis:
a. Inroduction to Phonological analysis
b. Standard Generative Phonology; Phonological alternation; Phonological processes; Phonological formalism
c. Autosegmental Phonology; Spreading Phenomenon: Tone, etc.
d. Prosodic Phonology; Stress, rhythm and intonation
e. Government Phonolgy, Dependency Phonolgy; Relations among sounds
f. Lexical Phonolgy; Phonolgy-Morphology Interface
g. Constraint-based accounts of Segmental and Prosodic Phenomenon; A basic introduction to Optimality Theory

Basic Readings:

1. Carr, Philip. 1993. Phonolgy. New York: St Martin Press
2. Gussenhoven, C. and Jacobs, H. 2011. Understanding Phonology. London: Arnold
3. Kenstowicz, Michael and Charles Kissberth. 1979. Generative Phonology. Description and Theory. Academic Press.
4.Schane, Sanford A. 1973. Generative Phonology. Prentice Hall.
5. Halle, Morris and G.N. Clements 1984 2nd printing. Problem Book in Phonology. A workbook for introductory courses in Linguistics and Modern Phonology. The MIT Press.

Further readings should be given for better understanding of the course materials

---

Optional Papers (Select any 1)

Generative Syntax – 2

OBJECTIVE: The aim of this course is to give an introduction to the recent advances in Generative Synatx, focussing largely on the Agree-based approach in Minimalist Program in comparison with the earlier GB theory. At the end of the course the students are expected to have:
a. A thorough understanding of the theoretical position and concepts of the early minimalist programme
b. An ability to analyse languages using the postulates of this theoretical framework.

This course is expected to cover the following aspects of the theory:
a. Moving from GB to Minimalism
b. Architectural Issues in Minimalist Setting; Rethinking D and S Structure
c. Theta Domains and Case Domains in Minimalism
d. Movement and Minimality effects in Minimalism, Copy theory of movement, motivation for move

alpha, LF and PF movement, checking devices
e. AGR o p, AGR p and Tense Phrase, Language specific phrasal categories
f. Spell-out, greed, procrastination, last resort, multiple-spec hypothesis, strong and weak features, interpretable and non-interpretable features

Basic Readings:
1. Hornstein, Norbert, Jaino Nunes and Kleanthes K. Grohmann. 2005. Understanding Minimalism. Cambridge: Cambridge University Press
2. Chomsky, Noam. 1995. The minimalist Program. Massachusetts: MIT Press
3. Epstein, S. D. and T.D. Seely. 2006. Derivations in Minimalism. Cambridge: Cambridge University Press.

Further readings should be given for better understanding and exposition of the concepts.

Logic and Natural Language Semantics

OBJECTIVE: The aim of this course is to introduce the students to the formal representation of language. It gives an overview of the basic logical representations used in Linguistics and Semantics. At the end of the course the students are expected to have
a. An understanding of the basic theoretical tenets of semantics
b. An ability to write and understand formal representations of meaning in natural languages and analyse the semantics of different aspects of language.

The course is expected to cover the following aspects:
a. Logic for Linguistics, Set Theory, Logical Operators
b. Inference and Logical Analysis of Sentences; Propositional Logic
c. Extensional Semantics; denotation, Sentence Meaning and Truth; Logical Relations
c. Model-Theoretic Semantics; Predicate Logic
e. Quantification and Logical Form
c. Intensional Logic
f. Lambda Abstraction
g. Language in Use

Basic Readings:
1. Chierchia, Gennaro and Sally McConnell-Ginet. 2000. Meaning and Grammar: An Introduction to Semantics. Cambridge:MIT Press
2. Allwood, Gens, Lars-Gunnar Andersson and Osten Dahl. Logic in Linguistics. Cambridge: Cambridge University Press

---

Language Learning and Language Pedagogy

OBJECTIVE: The aim of this course is to understand the way second language is learnt and how this understanding could be used for language teaching. The course gives an overview of the theories of second language learning and the theories of language teaching and how these two are correlated. At the end of the course the students are expected to have
a. An understanding of the theories of second language learning and pedagogy
b. An ability to understand the process of second language learning and suggest methods for language teaching

The broad areas to be covered during the course include:
a. Theoretical Approaches to explaining second language learning - UG Approach, Pragmatic Approaches, Cognitive approaches, socio-cultural approach and other kinds of approaches
b. Methods of Language Teaching - structural, functional, interactive and other kinds of methods
c. Role of Error Analysis in Language Teaching
d. Role and tools of e-learning and e-teaching in language pedagogy

Basic Readings:
1. Mitchell, Rosamond and Florence Myles. 2004. Second Language Learning Theories. Great Britain: Hodder Arnold
2. Whong, Melinda. 2011. Language teaching Linguistic Theory in Practice. Edinburgh: Edinburgh University Press

Further readings should be given to the students as required

Grammatical Frameworks in NLP

OBJECTIVE: The aim of this course is to introduce the students to different kinds of grammatical frameworks and theories which have been developed for modelling language for the purpose of Natural Language Processing. It gives an overview of some of the major theories and how they have been applied in practice. At the end of the course the students are expected to have
a. An Understanding of different kinds of frameworks being developed for carrying out the NLP tasks
b. An ability to use one of these theories to model any language for NLP.

The grammatical frameworks to be discussed during the course include:
a. Finite-State Methods, Context-free Grammars and N-gram Models
b. Head-driven Phrase Structure Grammar (HPSG)
c. Tree Adjoining Grammar (TAG)
d. Dependency Grammar
e. Categorical Grammar and Combinatory-Categorical Grammar
f. Constraint Grammar
g. Range Concatenation Grammar (RCG)

Basic Readings:
Readings on each of the framework should be given to the students

---

Acoustics and Experimental Phonetics

OBJECTIVE: The aim of this course is to introduce the students to different aspects of acoustic phonetics and phonology and its different applications. It will give a theoretical overview of the physical properties of speech sounds and how these are analysed and used in practice. At the end of the course the students are expected to have
a. An Understanding of the way sound waves work physically and the acoustic properties of natural language.
b. An ability to analyse the acoustic properties of sound waves and use it for different purposes

The following broad areas are expected to be covered during the course:

a. Acoustics and Physics of Sound Waves
b. Acquiring and managing speech data and speech corpus - Introduction to different kinds of recording devices
c. Visualization of Speech Sounds - Spectrograms
d. Acoustic Analysis of Vowels
e. Acoustic Analysis of Fricatives and Stops
f. Applications of Experimental Phonetics: Speech Synthesis, ASR, Forensic Linguistics and others

In addition to this the students will be trained for using the following softwares:
a. An audio editing software like 'Audacity'
b. Praat

Basic Readings:

1. Johnson, Keith. 2004. Acoustic and Auditory Phonetics 2nd ed. Oxford: Blackwell. (2nd addition only).
2. Ladefoged, Peter. 2003. Phonetic Data Analysis: An Introduction to Fieldwork and Instrumental Techniques. Oxford: Blackwell.

Further readings should be given to the students as required

Structures of Indian Languages

OBJECTIVE: This course is intended to be an intensive course on the structure of a specific language or a group of languages (in comparison with each other). The course is particularly aimed towards South Asian languages. After giving a brief introduction to the history and phonological, morphological and syntactic aspects of the language(s), an in-depth analysis of various aspects of the language would be taken up to examine the validity of current theoretical claims. Controversial issues would be often explored in detail. The primary objective is to get students involved in exploring the structure of a language and raise interesting theoretical issues.

Semester – 4

Compulsory Papers

Field Methods and Language Documentation

OBJECTIVE: The aim of this course is to introduce the students to the practical methods and techniques collecting language data from the field, documenting and archiving the language data and analysing the data to produce lexicons and descriptive grammars. The course involves a compulsory visit to the field for collection of data. The course would involve collection of basic word list, basic sentences and a more detailed data collection for analysing one of the aspects of the language. The focus of the course would be on the collection of as comprehensive data as possible of one of the smaller, endangered, tribal, less-studied or not-studied languages of India. In this course each student is expected to work one of the aspects of the language and produce a dissertation based on that. Thus overall the course would consist of two broad parts:
a. The analysis of different aspects of the language is expected to produce a pretty comprehensive grammar of the language.
b. The digitisation, documentation and archiving of the language data for the use of the posterity.

At the end of the course the students would be
a. Well-equipped to take field work in any language of the world.
b. Aware of some of the issues in field data collection, its documentation and description.

In this course the students would be made aware of the following issues before taking the actual field trip:
a. Basic Concepts for Language Description
b. Best practices and issues in Linguistic Fieldwork
c. Designing a Questionnaire
d. Data Elicitation and Recording
e. Ethical Issues
f. Language Documentation
g. Data Types and Metadata
h. Linguistic Annotation and Inter-linear Glossing
i. Ethnographic Details
j. Grammatical Sketch
k. Lexicon and Dictionary
l. Social Responsibility

The students will also be given basic training in the softwares for various purposes such as
a. Software to handle multimedia data and multimedia annotation (e.g., ELAN)
b. Software for Dictionary (e.g., Lexique Pro)
c. Software for Acoustic Study (e.g., Praat)
d. Software for general field work (e.g., Language Explorer)

Basic Readings:

1. Abbi, Anvita. 2001. A manual of Linguistic Fieldwork and Structure of Indian Languages. Munich: Lincom Europa.
2. Gippert, Jost, Nikolaus P. Himmelmann and Ulrike Mosel (eds.). 2006. Essentials of Language Documentation. Berlin: Mouton de Gruyter.
3. Chelliah, Shobhna and Willem J.D. Reuse. *Handbook of descriptive linguistic fieldwork***.** 2011. Springer.
4. Payne, Thomas. E**.** 1997. *Describing Morphosyntax. A guide for field linguistics*. Cambridge Univ. Press.

Additional books, articles and materials must be given to the students to further facilitate and help in the field work and documentation process.

Neurolinguistics and Language Disorders

OBJECTIVE: The main aim of this course is to introduce the students to working of language in human brain and the disorders related to the brain injury. While 'Experimental Psycholinguistics' focussed on the language processing in healthy brain (with emphasis on the experimental aspects of the processing studies), this course stresses on the disorders related to language. At the end of the course the students are expected to have
a. An understanding of the way brain processes languages and how languages are affected in both develomental and acquired disorders
b. An ability to study and analyse the disorders of human language.

The following broad topics are expected to be covered during the course:
a. Basic concepts in neuroscience and neurolinguistics
b. Phonology in neurolinguistics
c. Morphology and Syntax in neurolinguistics
d. Lexical Semantics in neurolinguistics
e. The semantics and pragmatics of communcation
f. Disorders of language - aphasis, dyslexia
g. Disorders of brain affecting language - Autism, Dementia, Schizophrenia

For this course the students are expected to work with the subjects who are suffering from one of the disorders affecting their linguistic capabilities and analyse their language.

Basic Readings:
1. Ahlsen, ELisabeth. 2006. Introduction to Neurolinguistics. Amsterdam. John Benjamins Publishing Company
2. Ingram, John C.L. 2007. Neurolinguistics An Introduction to Spoken Language Processing and its Disorders. Cambridge: Cambridge University Press.

Additional readings should be given to the students for better understanding of the materials and facilitate them in the fieldwork.

Optional Papers (Select any 2)

Endangered languages. Issues and Perspectives

OBJECTIVE: The aim of this course is to introduce the students to the issues related to the endangerment and ultimately death of languages, with special reference to the issue of language endangerment in India. At the end of the course the students are expected to have
a. An understanding of the issues and different perspectives regarding language endangerment.
b. An idea of how to tackle and reduce the rates of language death in the country.

The following broad topics are expected to be covered during the course:
a. What is happening to the languages of the world – different stages and levels of endangerment
b. UNESCO report in endangered languages of the world and India
c. Language Contact, Multilingualism and Language Endangerment
d. Language Politics, Language Education, Endangerment and Language Death in India
e. Linguistic, biological and biocultural diversity
f. Linguistic Human Rights
g. Measures for tackling language endangerment – language policy, orthography development, language in education and role of technology.
h. Documentation of endangered languages.

Basic Readings:
1. Austin, Peter K. and Julia Sallabank. 2011. The Cambridge Handbook of Endangered Languages. Cambridge: Cambridge University Press.
2. Skutnabb-Kangas, Tove. 2000. Linguistic Genocide in Education – or worldwide diversity and human rights? London: Lawrence Erlbaum Associates Publishers.

Language Politics and Planning in India

OBJECTIVE: The aim of this course is to make the students aware of and sensitive towards the politics built around language and the language planning in India. The course gives an overview of the way the concepts of languages, dialects and mother tongues are being constructed, propagated and planned in the country. At the end of the course the students are expected to have
a. An understanding and knowledge of the way languages are conceived and looked at in the constitution of India and among the general masses vis-a-vis the scientific notion of languages propagated by the linguists
b. An ability to analyse some of the major issues like language endangerment and death in the context of governmental and political policies related to languages

The following broad areas are expected to be covered during the course:
a. Languages in the Constitution of India
b. Languages in the Census of India
c. Language in Education in India
d. Language Planning and Standardisation in India

Basic Readings:
Relevant readings should be given to the students to understand the linguistic situation of the country.

Pragmatics

OBJECTIVE: This course is intended to introduce the students to basic principles and methods of pragmatics. It gives an overview of some of the concepts and theories in pragmatics. At the end of the course the students are expected to have
a. An understanding of the theories of human communication and discourse
b. An ability to carry out pragmatic analyses of natural language

Some of the broad areas to be covered in detail during the course include:
a. Speech Act Theory
b. Implicatures
c. Presupposition
d. Politeness Theories

Basic Readings:
1. Cutting, Joan. 2008\2010. Pragmatics and Discourse. UK: Routledge
2. Levinson, Stephen C. 1983. Pragmatics. Cambridge: Cambridge University Press
3. Watts, Richard J. 2003. Politeness. Cambridge: Cambridge University Press

Further readings should be given to the students as required

Areal Linguistics

OBJECTIVE: The aim of this course is to introduce the students to the methodology of areal studies in Linguistics with specific focus on South Asia as Linguistic Area. At the end of the course the students are expected to have
a. An understanding of terminologies and methodologies in Areal Linguistics
b. A practical ability to carry out the areal studies and draw semantic maps

The following broad areas are expected to be covered during the course:
a. What is areal linguistics and its relation with linguistic typology?
b. Areal data and methodology, Construction of databases for areal studies
c. Sprachbund and Linguistic Area
d. South Asia as a Linguistic Area
e. Phonological, Lexical and Morpho-syntactic features of South Asia

Basic Readings:

1. Emeneau, M.B. 1956. India as a Linguistic Area. Language, Vol. 32, No. 1, pp. 3-16.
2. Abbi, Anvita 1991. *Reduplication in South Asian languages. An areal, typological and historical study*. Allied Publishers
3. Abbi, Anvita. 1994. *Semantic Universals in Indian languages*. IIAS, Simla.
4. Haspelmath and others edited *World Atlas of Language Structures (WALS)*. Oxford. Use the online version http://wals.info/

Further readings should be given to the students as required

Hybrid Systems in NLP

OBJECTIVE: The aim of this course is to give an advanced understanding of the way most of the NLP systems work today - combining linguistic insights and formalism (called 'rule-based system', discussed in more details in 'Grammatical Frameworks in NLP' course) with an approach to computation and Artificial Intellegence called 'machine learning approach' (closely related to statistical and probabilistic approaches). It gives a theoretical overview of the machine-learning algorithms, focussing more on the computation part than on the mathematical part and trains the students in using these algorithms to solve their own research problem. At the end of the course the students are expected to have
a. An understanding of different kinds of machine learning and probabilistic methods and algorithms
b. A practical skill to develop their own hybrid systems for solving NLP problems

The major algorithms and approaches expected to be covered during the course include:
a. Probabilistic Graphical Models
b. Regression Models and Logistic Regression
d. Support Vector Machines
d. Maximum Entropy Models
e. Neural Networking
f. Memory-based Learning
g. Decision Trees
h. Unsupervised Learning and Grammar Induction
i. Evaluation of NLP Systems
j. Programming for Machine Learning, Octave\Matlab

Basic Readings:

1. Clark, Alexander, Chris Fox & Shalom Lappin (eds.). 2010. The Handbook of Computational Linguistics and Natural Language Processing. Wiley-Blackwell. (Select Readings)
2. Koller, Daphne and Nir Friedman. 2009. Probabilistic Graphical Models: Principles and Techniques. Cambridge: The MIT Press

Additional readings should be given to the students for better understanding of the materials.

Experimental Psycholinguistics

OBJECTIVE: The objective of this course is to introduce the students different kinds of experimental methods in psycholinguistics to understand how language is processed in the brain. It gives a theoretical overview of the different methodologies and experimental procedures and also hands-on experience on some of these procedures (subject to the availability of required equipments). At the end of the course the students are expected to have
a. An understanding of different kinds of experimental methods to understand language processing
b. An ability to design and carry out at least some of these experiments.

Some of the broad topics expected to be covered during the course include
a. Methods of experimental psycholinguistics - EEG, MEG, fMRI, PET, TMS, Eye-tracking, etc.
b. Processing of Morphology
c. Sentence Processing
d. Syntax and Morphology processing at Interfaces
e. Neurocognitive Models of Language Processing

Furthermore a hands-on experience with the following methods\softwares are expected:
a. Linger
b. Eye-tracking
c. Different Kinds of Brain-Imaging Techniques

Basic Readings:
1. Bornkessel-Schlesewsky, Ina and Matthias Schlesewsky. 2009. Processing Syntax and Morphology: A Neurocognitive Perspective. Oxford: Oxford University Press

Additional readings should be given to the students for better understanding of the materials and facilitate them in the experiments

Computational Lexicography

OBJECTIVE: The aim of this course is to train the students in the field of lexicography using the modern tools and techniques of dictionary develoment. It gives an overview and training in different kinds of dictionaries and lexical resources that could be developed both for human as well as machine consumptio. At the end of the course the students are expected to have
a. An understanding of different kinds of dictionaries that could be developed and the purpose of dictionary develoment.
b. An ability to create their own dictionaries

The following areas will be covered in the theoretical part of the course:
a. Introduction to Lexicography
b. Lexicographic Entries and Semantic Fields
c. Different kinds of human-readable dictionaries
d. Usage of dictionaries

The following aspects will be covered in the practical part of the course:

a. Developing Machine-readable dictionaries
b. Developing and Querying WordNets and FrameNets
c. Developing Online Dictionaries
d. Developing dictionaries from large Corpora
e. Tools for dictionary develoment - SIL's Language Explorer and Lexique Pro

Basic Readings:

1. Atkins, B. T. Sue and Michael Rundell. 2008. The Oxford Guide to Practical Lexicography. Oxford: Oxford University Press

Additional readings should be given for better understanding of the theoretical concepts and facilitate in the process of dictionary development

---

Conversation Analysis and Discourse Analysis

OBJECTIVE: The objective of this course is to present two dominant forms of analysing 'talk' or 'speech' in a language. It gives an overview of conversation analysis (CA) in comparison with different kinds of discourse analysis (DA). At the end of the course the students are expected to have
a. A clear understanding of different approaches to DA and CA
b. A practical ability to carry out CA and DA of different kinds of texts.

Following broad areas are expected to be covered during the course:
a. Origins and Orientations of the two approaches
b. Methods of DA and CA
c. Simialrities and Difference between CA and DA
d. CA and the rhetorical turn in Discourse Studies
e. Discursive Psychology
f. Critical Discourse Analysis
g. CA and Power.

Basic Readings:

1. Woofitt, Robin. 2005. Conversation Analysis and Discourse Analysis. London: Sage Publications

Additional readings should be given to the students for better understanding of the concepts and facilitate in actual CA and DA.

Translation Theory and Machine Translation

OBJECTIVE: The objective of this course is to introduce the students to the translation theories, with a specific focus on machine translation, machine-aided human translation and human-aided machine translation. The first third of the course would deal with the theories of translation while the latter two-thirds of the course would be concerned with the technical aspects of implementing, testing and developing machine translation systems. The students would be introduced to the techniques and methodologies of developing a statistical machine translation system. At the end of the course the

students are expected to have
a. An understanding of the theoretical issues and aspects of translation for a better understanding of the task at hand.
b. An understanding of the issues in machine translation
c. An ability to develop machine translation systems using the existing systems for statistical machine translation.

The following areas are expected to be covered during the course:
a. Issues in translation theory
b. Translation theory before the 20th century
c. Equivalence and equivalent effect
d. Translation product and process
e. Functional Theories of translation
f. Discourse and register analysis approaches
g. System theories
h. Cultural and ideological turns
i. Philosophical theories of translation
j. Translation and new media
k. Issues in machine translation
l. Statistical MT using Moses system

A hands-on training of developing statistical\hybrid MT system would be given to the students.

Basic Readings:
1. Munday, Jeremy. 2008. Introducing Translation Theories: Theories and Applications (Second Edition). London: Routledge.

Additional readings should be given for better understanding of the theories and facilitate in developing MT system.

Seminar

OBJECTIVE: In this course an issue of current theoretical\practical interest which is not fully discussed in the other courses will be taken up. The primary goal of this course is to create a space for designing new courses of theoretical interest in collaboration with students depending on the recent theoretical and experimental advances in the field of linguistics. It also provides a space in the tightly scheduled course-scheme for a visiting scholar to offer a course of his/her interest and specialization and arouse the interest of the students in areas which remain unexplored otherwise.