PG Diploma in Clinical Linguistics

Affiliated to University of Mysore

Regulations and Syllabus - 2012

DIRECTOR



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Department of Speech-Language Pathology PG Diploma in Clinical Linguistics

1. Purpose

Clinical Linguistics is a field of linguistics that deals with the application of linguistic principles to clinical setting and communication disability (Crystal, 1982).

The area of clinical linguistics is also viewed as an independent multi disciplinary field sharing with several domains as language pathology/disorders, communication disorders, speech and hearing, and within linguistics field, neurolinguistics, psycholinguistics and sociolinguistic etc., Clinical linguistics is thus an integrated field drawing from the field of speech and language pathology and linguistics besides basic input from medical and paramedical sciences like anatomy, neurology, pediatrics, genetics, physiotherapy, occupational therapy, behavior sciences like clinical psychology, education etc. Clinical linguistics thus involves collaborative work with interdisciplinary interactions studying language development and disorders in a clinical setting.

Keeping this in view, this course is intended for B.Sc. (Speech & Hearing) graduates and Speech Language Pathologists already working as clinicians for improving their clinical skills by developing linguistic insights into language disorders.

2. Justification

Different language skills of speaking, listening, reading and writing are looked at from normal as well as disordered perspectives. The linguistic structures (form) content and use in children phonological and grammatical disabilities are looked at. It is a combined approach of a linguist and a Speech-Language Pathologist. Language disorders in children and adults are perused and analyzed with respect to clinical phonology, morphology, syntax, semantics and pragmatics. Such analysis is necessary for evaluation, remediation and management of communication disorders. This knowledge of linguistics is essential during the management of data in greater details for communication disorders as studied in Speech-Language Pathology.

Generation of manpower in the field of clinical linguistics as applicable to Speech-Language Pathology must also be taken care of to manage the additional work load of analysis, interpretation for assessment and in management strategies of various speech and language disorders envisaged in the coming years.

3. Preamble

Falling in tune with the recent national policy framework announced by MHRD, Government of India for promotion of post - graduate education and research in technology, a **PG Diploma in Clinical Linguistics for SLP** is being run by the All India Institute of Speech and Hearing, Mysore since year 2009.

Falling in tune with the commitment of the University of Mysore towards enforcing progressive methods of teaching and learning, the *PG Diploma in Clinical Linguistics* shall be under *credit based* frame work, which shall be on par with the academic practice in Dept. of Studies in Computer Sciences, University of Mysore in India and in all Universities abroad.

Falling in tune with the approval already granted by the various bodies and the Chancellor of Government of Karnataka, instituted and implemented vide the University notifications, AC - 2 (S)/508/97-98 dated 28.12.98 and AC - 2(S)/526/98-99 dated 23.8.2000.

There will be *continuous assessment of the examinees*. All over the globe and also in India in the Dept. of Studies in Computer Science, University of Mysore, in the Department of Speech- Sciences, AIISH, Mysore in India and in other institutions, the examinees of the similar type are assessed on a continuous basis in every term, contrast to assessment based on one term-end examination, and are accredited in terms of *credit and grade points*. At such a very high profile of learning, knowledge transfer and imbibing backdrop, awarding absolute marks and ranks stand to loose their vigour, significance and relevance. Hence the proposal is to adopt the worldwide practiced credit and grade point based continuous evaluation.

The All India Institute of Speech and Hearing, Mysore is **equipped** to experiment this credit patterned PG Diploma programme as it is already conducting one such programme in the name of **PG Diploma in Forensic Speech Science and Technology**.

4. Regulations for PG Diploma in Clinical Linguistics

4.1 Programmme

The programme will be called as **PG Diploma in Clinical Linguistics.** A candidate who maintains normal pace of studies requires 2 semesters (12 months with Vacation) to earn the stipulated 40 credits for PG Diploma.

4.2 Eligibility, mode of selection and intake

4.2.1 Intake

The total intake shall be 10 seats. The programme will be offered if a minimum of 4 candidates are admitted

4.2.2 Eligibility

Admission to **PG Diploma in Clinical Linguistics** is open to the candidates who have passed in any of the following examinations of the University of Mysore or any other recognized University/ institute with a minimum of pass class in the qualifying examination.

- a) B. Sc. (Sp. and Hg.)
- b) BASLP

4.2.3 Mode of selection

- (a) The eligible applicants shall be listed in order of merit which is decided based on the marks in the qualifying examination.
- (b) The admissions shall be in accordance with the merit cum reservation policy of the Organization running the programme.
- (c) Short listed candidates will undergo an interview. The final selection will be based on the discretion of the Head of the Institution.

4.2.4 Duration of the programme

For a candidate who maintains the normal pace in his studies, this will be a two term programme of 10 months duration. The calendar of events is given below: which will commence on 1st of August every year:

o I Semester: August to December

II Semester: January to May

4.2.5 Attendance requirement, Progress and Conduct

The candidate has to put in a minimum of 75% of the attendance in every course. Condonation of attendance is as per regulations of University of Mysore.

The minimum attendance required for crediting is 75%. If the attendance in any course is less than 75%, the candidate is said to have dropped that course and the credits earned in that course by the candidate becomes zero or in other words it becomes equivalent to the withdrawal of registration in that course. However, he/she has to attend the whole semester in the next academic year.

4.2.6 Implementation of credit pattern (for *PG Diploma in Clinical Linguistics*) Overall Structure

One credit is 1 hour of theory / 2 hours of practicals (or) Tutorials. A candidate has to earn 40 credits to complete *PG Diploma in Clinical Linguistics*.

Normally a candidate can complete the programme over 2 semesters (12 months with break) and he/she is permitted to complete the programme in a period of 4 semesters (24 months), beyond which a candidate is said to be ineligible for the degree, which is as per the norms of double the duration to complete a programme.

4.2.7 Titles of papers, practicals offered for the programme with teaching hours/week

X is the no. of hours of theory classes per week; Y is the no. of hours of tutorials per week.

	Χ	Υ	Total credit
			=X + Y
Hours	3	2	3+1= 4
credits	3	1	4

4.2.8: Scheme of Examination / Evaluation

The teacher who offers a course shall wholly be responsible in assessing a candidate in that course. The evaluation of the candidate shall be based on continuous assessment. The modalities should normally be defined by the teacher himself / herself. A broader structure for evaluation is as follows:

The course shall be evaluated for a maximum of 100 marks made up of the following components.

Components

The details of continuous assessment are summarized in the following Table.

Component	Component Syllabus in a course		Period of Continuous assessment		
C1	First 50% (2 units of total units)	25%	First half of the semester. To be consolidated by 8th week		
C2	Remaining 50% (Remaining units of the course)	25%	Second half of the semester. To be consolidated by 16th week		
C3	C3 Semester-end examination (All units of the course)		To be completed during 18th-20th Week.		
Final grades to be announced latest by 24th week					

The course shall be evaluated for a maximum of 100 marks made-up of the following components:

Components 1 & 2 shall be made-up of tests, seminars, discussions, and presentations made by the candidate, assignments and such similar performance evaluating activities. Component 3 shall be at the end of the term and shall be based on a written examination. The method followed by a teacher to evaluate his/her candidates shall be uniform to all the candidates and the teacher shall keep the testing mode informed to the candidates at least 5 days in advance.

For the clinical practicals for Component 3 there will be a viva voce for 50% of the marks in the end of the second semester. Which will be conducted by an internal and an external examiner awarding 25% of the marks.

4.2.9: In case a candidate secures less than 30% in C1and C2 put together in a course, the candidate is said to have DROPPED that course, and such a candidate is not allowed to appear for C3 in that course. In case a candidate's class attendance in a course is less than 75% or as stipulated by the University, the candidate is said to have DROPPED that course, and such a candidate is not allowed to appear for C3 in that course.

Teachers offering the courses will place the above details in the Department Council meeting during the last week of the semester, before the commencement of C3, and subsequently a notification pertaining to the above will be brought out by the Chairman of the Department before the commencement of C3 examination. A copy of this notification shall also be sent to the office of the Registrar & Registrar (Evaluation).

In case a candidate secures less than 30% in C3, he/she may choose DROP/MAKEUP option. In case a candidate secures more than or equal to 30% in C3, but his/her grade (G) = 4, as per section 6.9 below, then he/she may be declared to have been conditionally successful in this course, provided that such a benefit of conditional clearance based on G=4 shall not be availed for a maximum of 8 credits for the entire programme of Master's Degree of two years.

In case a candidate secures more than 30 % in C3 but G=4, then he/she may choose DROP/MAKE-UP option. The candidate has to exercise his/her option immediately within 10 days from the date of notification of results. A MAKE-UP examination will be conducted within 25 days from the date of notification of results. If the candidate still remains unsuccessful after MAKE-UP examination he/she is said to have DROPPED that course.

A candidate has to re-register for the DROPPED course when the course is offered again by the department if it is a hard core course. The candidate may choose the same or an alternate core/elective in case the dropped course is soft core / elective course. A candidate who is said to have DROPPED project work has to re-register for the same subsequently within the stipulated period. The details of any dropped course will not appear in the grade card.

4.2.10: The grade and the grade point earned by the candidate in the course will be as given below.

Р	G	$GP = V \times G$
90-100	10	V X 10
80-89	9	V X 9
70-79	8	V X 8
60-69	7	V X 7
50-59	6	VX6
40-49	5	V X 5
30-39	4	V X 4
0->30	0	V X 0

Here, P is the percentage of marks (P=[(C1+C2)+M] secured by a candidate in a course which is rounded to nearest integer. V is the credit value of course. G is the grade and GP is the grade point.

Classification of results

The final grade point (FGP) to be awarded to the student is based on CGPA secured by the candidate and is given as follows.

CGPA	FGP				
	Numerical Index	Qualitative Index			
4 <= CGPA < 5	5	SECOND CLASS			
5 <= CGPA < 6	6				
6 <= CGPA < 7	7	FIRST CLASS			
7 <= CGPA < 8	8				
8 <= CGPA < 9	9	DISTINCTION			
9 <= CGPA < =10	10				

Overall percentage = 10*CGPA or is said to be 50% in case of CGPA < 5

Fee structure

In the beginning of the programme, the prevailing a fee will be paid to the Institute in addition to the fees stipulated by the University of Mysore.

5.1 Project work

Normally the candidate shall register for the **project work** in the 2nd Semester. This is a compulsory part of the programme with a credit value of 6. This work should be carried out over an entire term period. A candidate can register for project work after he has acquired at least 20 credits successfully. PG Diploma students are expected to work in the broader areas of Clinical Linguistics. The students can be tied up with outside experts/ agencies, if required. Right from the initial stage of defining the problem, the candidate has to submit the progress reports periodically and also present his progress in the form of seminars in addition to the regular discussion with the guide. Components of evaluation are as follows:

Component – I (C1): Periodic Progress and Progress Reports (25%)

Component – II (C2): Results of Work and Draft Report (25%)

Component – III (C3): Final viva-voce and evaluation (50%). The report evaluation is for 35% and the viva voce examination is 15%.

The (C3) (component-III) for the dissertation shall be evaluated by a panel of two members consisting of the guide and an external examiner.

The total score will be converted into grade as defined earlier. The final viva voce for a candidate shall be generally conducted at the end of the programme of that candidate.

5.2 Provision for appeal

A candidate, if dissatisfied with the grades that he/she has got with a feeling that he/she is unnecessarily penalized, can approach the grievance cell with the written submission together with all facts, factual and all the assignments, test papers etc, which were evaluated. He/she can do so before the semester end examination (based on 3 continuous assessments already made) or after the semester end examination (Within 7 days of the results being announced). The grievance cell is empowered to revise the grades if the case is genuine and is also empowered to penalize the candidate if his/her submission is found to be baseless and unduly motivated. The penalty in such a case could be even up to the expulsion of the candidate from the course. The decision taken by the grievance cell is final.

The Director of the institute will be the Chairperson of the grievance cell. The composition of the grievance cell is as follows:

- 1) Director as the Chairperson
- 2) Two senior faculty members from the department
- 3) Two senior faculty members/subject experts from outside the institute
- 4) Additional lady faculty member (in case not covered by 1, 2 & 3), and
- 5) Additional faculty member from a minority community (in case not covered by 1, 2, 3, & 4)
- 6) Additional faculty member from SC/ST category (in case not covered in 1, 2, 3, 4, & 5)
- 7) Teacher /mentor as convenor

The appropriate fee shall be collected from the candidate who goes for an appeal to the grievance cell as fixed by the university.

PGDCL CBCS and CAGP Regulations – 2012

Revised Structure of PGDCL CBCS Scheme

Sem.	Paper No.	Credit L:T:P	Total Credits	No. of Hrs (Hr x Cr)	Credits	No. of Hrs/wk	Total no. of hours / week	HC/SC /OE	Title of the paper
I	81601	3:1:0		L=3 * 1 = 3 T=1 * 2 = 2	4	5		HC	Fundamentals of Clinical Linguistics
	81602	3:1:0		L=3 * 1 = 3 T=1 * 2 = 2	4	5		HC	Readings in Psycho and Neuro- linguistics
	81603	3:1:0	20	L=3 * 1 = 3 T=1 * 2 = 2	4	5	24	HC	Multilingualism in the Indian context
	81604 or 81605 or 81607 or 81608	3:1:0		L=3 * 1 = 3 T=1 * 2 = 2	4	5		SC	Research methods and statistics or Phonology in Speech-Language Pathology or Softwares in Speech-Language Pathology or Signal Processing in Speech-Language
	81609 / 81610	4:0:0		L = 4 * 1 = 4	4	4		OE	Pathology Open Electives (Computers / Speech Sciences)
II	81621	3:1:0		L=3 * 1 = 3 T=1 * 2 = 2	4	5		HC	Linguistic analysis – Child language disorders
	81622	3:1:0	_	L=3 * 1 = 3 T=1 * 2 = 2	4	5		HC	Linguistic analysis – Adult language disorders
	C107#	0: 0: 6	20	P =6* 2 = 12	6	12	32	HC	Clinical practicals
	C108	2:4:0	40	L=2 * 1 = 2 T=4 * 2 = 8	6	10		HC	Project
			40						

The activity will commence from I Semester

L: Lecture, T: Tutorials, P: Practicals

One credit is 1 hour of theory / 2 hours of Tutorials/ 2 hours of practicals.

Course Coverage

Theory and Practical components

81601: Fundamentals of Clinical Linguistics

Unit-1: Introduction to Clinical Linguistics

- a) Definition of Clinical Linguistics
- b) History of Clinical Linguistics
- c) Function and scope of Clinical Linguistics
- d) Clinical linguistics and its role in the field of Speech, Language and Hearing disorders

Unit 2: Components of Language

- a) Phonetics and Phonology- Review of basic phonetics and phonology; distinctive features, common phonological processes used in clinical setup.
- b) Morphology- Review of basic morphology and Principles and practices of morphemic analysis as described by Eugene Niola.
- c) Syntax-Review of basic syntax & methods of syntactic analysis.
- d) Semantics- Review of basic semantic terms such as synonymy, hyponymy, opposition, syntagmatic relations, componential analysis, phonetic meaning, phonological meaning and grammatical meaning.
- e) Pragmatics- Basic terms viz: Discourse, speech acts, maxims, presuppositions.

Unit 3: Biological, Social and psychological bases of language

- a) Developmental
- b) Neurological
- c) Genetics
- d) Issues in socio-linguistics –standard and nonstandard dialects, regional and social dialects, stylistic variation of language, gender & language, registers, Creoles, pidgins, relation between language, culture, religion, politics, etc.
- e) Dialects, Diglossia, multilingualism, register, second language acquisition, Attention, memory.

Unit 4: Models and aspects of Language Acquisition: Studies in Western and Indian Context

- Biological maturation theory, Linguistics theory, Behavioral theory, Social interaction theory, Integrated approach, Cognitive theory, Information processing model
- b) Pre-linguistic and linguistic stage of language development: phonology, semantics, syntax and pragmatics

81602: Readings in Psycho and Neuro-linguistics

Unit- 1: Introduction to psycholinguistics

- a. History of psycholinguistics
- b. Methods of Psycholinguistics: Basic and applied
- c. Models of psycholinguistics
 - i. Perception and production
 - ii. Representation and processing
 - iii. Monolingual and bi/multi lingual
 - iv. Literacy related issues

Unit-2: Introduction to neuro- linguistics

- a. History of neuro- linguistics
- b. Neurophysiologic correlates, critical period
- c. Cerebral dominance, role cerebral hemi-spheres and sub-cortical structures
- d. Models of Neuro-linguistics
 - i) Localization, non-localization, processing models, computational and other models
 - ii) Non-invasive neuro-imaging techniques

Unit 3: Language and Cognition

- (a) Relevance of normal cognitive skills in acquisition of language
- (b) Type of cognition
- (c) Stages of cognitive skills
- (d) Cognitive models of language function

Unit-4: Language, Cognition and Brain

- Relation between language, cognition and Brain. Typical Language & cognitive processing with respect to Attention, Memory, Executive process etc.
- b. Evidence from Developmental and age related and acquired disorders

81603: Multilingualism in the Indian context

Unit-1: Multilingual and Multicultural issues

- a) Introduction to multilingualism
- b) A brief introduction to the major Indian language families- some of the features of different language families such as Dravidian, Indo-Aryan, Tibeto-Burman, Austro-Asiatic
- c) Cultural diversity of India.

Unit-2: Bilingual language acquisition

Definitions, Types- compound, coordinate, subordinate etc., Acquisition with respect to levels-phonology, Morphology, Syntax etc. & Domains of language and Pragmatics.

Models

Unit-3: Issues in Bi/multi-lingualism

- a. Language contact, convergence, maintenance, shift and loss
- b. Code mixing, code switching
- c. Language planning and policies-three language formula

Unit-4: Issues in multiculturalism

- a) Linguistic determinism, linguistic relativity, Sapir-Whorf hypothesis
- b) Language and Literacy
- c) Cultural issues in verbal and non-verbal communication
- d) Implications of Multicultural and multilingual issues in Assessment and Management with respect to clinical situation in India.

81604: Research methods and statistics

Unit 1: Review of basic statistics, statistical measures and their features, Correlation and regression, Probability laws and hypothesis testing, Chi-square test and measures of association, Review of comparison of two means.

Introduction to ANOVA, different types, assumptions, mathematical model and simple numerical calculations under one-way ANOVA

Introduction to non-parametric tests - Mann-Whitney and Wilcoxon's tests

Unit 2: Single subject and group designs, various types Research Methods- Descriptive, predictive, explanatory Survey methods and field survey, various types of sampling

- Unit 3: Qualitative research methods in the field of clinical linguistics Ethnographic, unstructured, grounded theory, discourse analysis, content analysis, phenomenology, conversation analysis, genetic methods, historical research, culture specific and ecology based research methods
- Unit 4: Ethical principles and practices in the field of research in clinical linguistics Meaning, scope and applications of computational linguistics

Introduction to various statistical softwares

Practicals on use of computers – basic data analysis, graphs and diagrams.

81605: Phonology in Speech-Language Pathology

Unit 1: Sound Arrangement & Spelling Advancement

The speech sounds of some Indian languages

Production and Organisation of speech sounds

Children's acquisition of a phonological system

Development of Reading & pre-reading skills: phonemic awareness; mastery of sound/symbol correspondences; mastery of spelling rules & irregular spellings.

Unit 2: Word Structure and its acquisition

Word structure in Indian languages

How words are organized in the mind: mental lexicon

How children learn words

Differences in inflection and derivation across languages

Unit 3: Sentence Structure and its acquisition

Sentence structure in Indian languages

How sentences function in communication

How children acquire sentence structure

Pre-school and school-years sentence structure development

Unit 4: Diversity within and across Language

A comparative study of various Indian languages

Language and dialect relationship/differences

Dialect differences and social attitudes

Learning the other language: Issues and factors

81607: Softwares in Speech-Language Pathology

- a) Parameters of speech, language and cognition amenable for analysis using softwares
 - General introduction to the parameters of speech, language and cognition that can be measured quantitatively using softwares
 - Need for softwares in speech-language pathology
 - Offline and online processing measures: characteristics and advantages, examples of softwares used for these processing measures
 - Correlating the output from softwares with behavioural data obtained from normal and clinical groups
- b) Learning the softwares applicable for measures of speech
 - Measuring the parameters of voice, articulation and fluency using PRAAT and CSL programs
 - Clinical and research applications of PRAAT and CSL programs
 - Interpretation of data through analysis of normative and clinical data
- c) Learning the softwares applicable for measures of language and cognition part 1
 - Measuring transcribed linguistic units using SALT software, clinical and research applications
 - Interpretation of data through analysis of normative and clinical data
 - Introduction to the measures of cognitive-linguistic processing using Neuroscan
 - Preparing linguistic stimuli for ERPs in cognitive research

- d) Learning the softwares applicable for measures of language and cognition part 2
 - Measuring language processing and cognitive control using Cognispeed, DMDX and Eye Tracker softwares
 - Clinical and research applications of Cognispeed, DMDX and Eye Tracker softwares
 - Interpretation of data from Cognispeed, DMDX and Eye tracker softwares through analysis of normative and clinical data

81608: Signal Processing in Speech-Language Pathology

- 1. Fundamentals of Digital signal processing: a) Analog Signal & Digital Signal (b) Analog to Digital & digital to Analog Convertors (c) Need & Advantage of Digital systems & Digital Signal Processing.
- 2. Principles of Digital signal processing-(a) IIR system & FIR System its realization & Implication (b) basics of IIR & FIR filters & their implementation.
- 3. Biomedical signals and Signal processing: Principles of generation & Acoustic/Physical Characteristics of acoustic stimuli-(a) pure tones, tone burst, warble tones & clicks
- 4. Evoked potentials- (a) Working Principles (b) Electrodes (c) Recording of Responses.
- 5. Electrodes and transducers-(a) Signal Acquisition techniques from electrodes & transducers (b) Signal Processing techniques such as differential amplification, common mode rejection, artifact rejection, filtering, signal averaging.(c) Addition & Subtraction of Waves

OPEN ELECTIVES

81609: Computers

Objectives

- a) To give an overview of the latest technology of computers and information and communication technology.
- b) To provide fundamental concepts of information technology and the tools for diagnostics and therapeutics in Speech Language Sciences.
- c) To learn the various applications of computers and information and communication technology relevant to the field of clinical linguistics.
- d) To understand and observe the principle of working and functioning of equipments used for assessment of speech and language.
- e) To learn practically the operation of software tools for clinical linguistics.
- f) To lay the foundation of ICT (Information and Communication Technology) concepts and illustrate the applications of ICT in clinical linguistics.

Unit 1: Introduction to Computers and Information and Communication Technology - 8 hours

Introduction to Computers - Block diagram & functional description of each block.

Introduction to Hardware components of a computer - SMPS, Hard disk, mother board and Chipset, processor, RAM etc.,

Introduction to computer peripherals - monitors, scanners, printers, optical drive, storage devices.

Types of computer systems - Desk top, laptop, workstation, server.

Introduction to Operating systems - Types of operating system, Role and functions performed by operating systems.

Unit 2: Introduction to Information and Communication Technology

Introduction to computer networks - types of network, Topology and structure of each type, implementing a computer network.

Basic structure and functioning of Internet, world wide web, e-mail, types of internet connectivity etc

Introduction to modulation, types of modulation, their fundamental principles and functioning.

Basic structure of Satellite communication, its implementation, merits and demerits

Unit 3: Applications of Computers in Clinical Linguistics

Block diagram and functional description of:

- a) Speech Spectrograph and CSL
- b) Voice analysis systems
- c) Articulograph
- d) Nasometer
- e) Palatograph

Introduction to Application softwares for clinical linguistics:

- a) SALT
- b) PRAAT

Introduction to unicode - its features

Techniques of assessing language through computer technology

Unit 4: Applications of Information and Communication Technology in Clinical Linguistics

Introduction to video conference systems

Introduction to systems for tele diagnosis and tele rehabilitation, ways of implementing these systems in the field of clinical linguistics.

Introduction to Data base systems, their structure and application in clinical linguistics

Organization of server based data base systems, selection and integration of these systems with mass storage systems.

Introduction to data centre, its organization and structure

81610: Speech Sciences

Objectives

To train the students in the areas of phonology, voice, fluency, speech physiology and speech acoustics.

Unit 1: Anatomy & physiology of speech mechanism

8 Hours

Anatomy of Larynx, Voice production and characteristics of normal voice Physiology of respiration: Description of respiratory dynamics and respiratory analysis Anatomy & physiology of larynx: Muscles of the larynx, Laryngeal movements

Unit 2: Basics of Phonology, voice and fluency

8 Hours

Review of phonological development and articulatory mechanism Neurophysiological bases of speech: Neuro-motor mechanism of the articulatory, phonatory and respiratory systems Fluency: Definition of fluency, aspects of fluency,, development of fluency, Normal non fluency and Stuttering Characteristics

Unit 3: Basics of acoustics

8 Hours

Acoustics of speech
Basics of acoustics of vowels and consonants

Unit 4: Spectrographic analysis of speech

8 Hours

Visualisation of spectrographic cues using software for vowels and consonants, identification of place, manner, voicing.

Practical

- i. Basics of recording the audio samples, speech sample and familiarizing few basic software
- ii. Perceptual analysis of pitch, loudness and quality of voice, differentiate normal and abnormal voice listening to voice samples
- iii. Instrumental analysis of voice F0 measures, amplitude and related measure
- iv. Familiarizing with Aerodynamic measurements/ respiratory measures of speech Visual inspection of the acoustic characteristics of vowels, consonants in conjunction with place, manner of articulation and voicing
- v. Differentiating of NNF and dysfluency, recording speech sample and rating the voice, intelligibility and fluency of speech

Semester-2

81621: Linguistic analysis - Child language disorders

Unit 1: Phonological deficits in developmental disorders - Assessment and intervention

- a) Phonological development in MR, Autism, HI, SLI, LD
- b) Phonological deficits in MR, Autism, HI, SLI, LD
- c) Tools for Assessment (Analysis)
- d) Tools for Intervention of phonological deficits.

Unit 2: Morpho-Syntactic and Semantic deficits in developmental disorders- Assessment and intervention

- a) Morphosyntactic development in MR, Autism, HI, SLI, LD
- b) Morphosyntactic deficits in MR, Autism, HI, SLI, LD
- c) Tools for Morphosyntactic Assessment (Analysis)
- d) Tools for Morphosyntactic deficits treatment.
- e) Semantic development in MR, Autism, HI, SLI, LD
- f) Semantic deficits in MR, Autism, HI, SLI, LD
- g) Tools for Assessment of Semantics (Analysis)
- h) Tools for treatment of semantic deficits.

Unit 3: Pragmatic deficits in developmental disorders- Assessment and intervention

- a) Pragmatic development in MR, Autism, HI, SLI, LD
- b) pragmatic deficits in MR, Autism, HI, SLI, LD
- c) Tools for Assessment of Pragmatic skills
- d) Tools for treatment of Pragmatic deficits

Unit 4: Discourse, Paralinguistic features, Metalinguistic, Extralinguistic

- a) Discourse deficits in MR, Autism, HI, SLI, LD
- b) Tools for Assessment of discourse, Paralinguistic features, Metalinguistic features
- c) Tools for treatment of discourse deficits

81622: Linguistic analysis - Adult language disorders

Unit 1: Phonological deficits in Acquired disorders - Assessment and intervention

- a) Phonological deficits in Aphasia, Dementia, RHD, TBI, Acquired dyslexia and Agraphia
- b) Tools for Assessment of phonological deficits (Analysis) in various adult language disorders
- c) Tools for Intervention of phonological deficits in various adult language disorders.

Unit 2: Morpho-Syntactic and Semantic deficits in Acquired disorders- Assessment and intervention

- a) Morphosyntactic deficits in Aphasia, Dementia, RHD, TBI, Acquired dyslexia and Agraphia
- b) Tools for Morphosyntactic Assessment (Analysis)
- c) Tools for Morphosyntactic deficits treatment.
- d) Semantic deficits in Aphasia, Dementia , RHD , TBI , Acquired dyslexia and Agraphia
- e) Tools for Assessment of Semantics (Analysis) in various adult language disorders
- f) Tools for treatment of semantic deficits in various adult language disorders.

Unit 3: Pragmatic deficits in Acquired disorders- Assessment and intervention

- a) pragmatic deficits in Aphasia, Dementia, RHD, TBI, Acquired dyslexia and Agraphia
- b) Tools for Assessment of Pragmatic skills in various adult language disorders
- c) Tools for treatment of Pragmatic deficits in various adult language disorders

Unit 4: Discourse, Paralinguistic features, Metalinguistic, Extralinguistic

- a) Discourse deficits in Aphasia, Dementia, RHD, TBI, Acquired dyslexia and Agraphia
- b) Tools for Assessment of discourse, Paralinguistic features, Metalinguistic features in various adult language disorders
- c) Tools for treatment of discourse deficits in various adult language disorders

C 107: Practicals in Clinical Linguistics

- a) Learning International Phonetic Alphabets (IPA)
- b) Transcribing samples (Words) of normal children in native language
- c) Transcribing samples (sentences) of normal children in native language.
- d) Transcribing samples (Words) of children and adults with communication disorders
- e) Transcribing samples (sentences) of children and adults with communication disorders.
- f) Models of Phonology, Morphology, semantics, syntax, discourse & pragmatics
- g) Morphemic Analysis of 10 sentences in CLDs and ALDs
- h) Syntactic analysis of 10 sentences in CLDs and ALDs
- i) Studying the development of phonology in 2-, 3-, 4-, 5- year old normal children
- i) Studying the development of syntax in 2-, 3-, 4-, 5- year old normal children
- k) Studying the development of pragmatics in 2-, 3-, 4-, 5- year old normal children
- Studying the development of phonology in 2-, 3-, 4-, 5- year old children with communication disorders; Phonological deficits in adults with communication disorders
- m) Studying the development of syntax in 2-, 3-, 4-, 5- year old children with communication disorders; syntactic studies in adults with communication disorders
- n) Studying the development of pragmatics in 2-, 3-, 4-, 5- year old children with communication disorders; Pragmatic studies in adults with communication disorders
- o) Profiling of SLI ,Autism spectrum Disorders, Hearing Impairment, MR,LKS,LD, TBI/ Childhood Aphasia and ALDs like Aphasia, RHD, TBI and Dementia
- Profiling of linguistic skills (Phonology, Morphology, syntax, semantics and pragmatics) in SLI, HI, ASD, MR, LD (1 subject each) and ALD 's like Aphasia, RHD, TBI and Dementia (1 subject each)
- q) Write up of all the test batteries used for child and adult language analysis
- r) Write up of all the softwares that are used for child and adult language analysis

C 108: Independent project

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