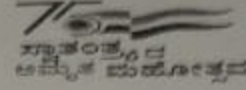




KARNATAK UNIVERSITY, DHARWAD
ACADEMIC (S&T) SECTION

ಕರ್ನಾಟಕ ವಿಶ್ವವಿದ್ಯಾಲಯ, ಧಾರವಾಡ
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ISAC APPROVED
15 Dec 2014

website: kud.ac.in

No.KU/Aca(S&T)/MSc-Aud&MASLP-252/2025-26/ 223

Date: 18/11/2025

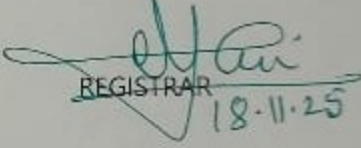
NOTIFICATION

Sub: Regarding the syllabus of BASLP Embedded-V to VIII Semester w.e.f. 2025-26 & onwards.

- Ref: 1. BoS Res. No. 01, dt: 17.07.2025.
2. Faculty Res. No. 04, dt: 14.10.2025.
3. Academic Council Res. No. 02, dt: 28.10.2025.
4. Vice-Chancellor's order dated: 14/11/2025

With reference to the above subject cited, a notification has been issued for BASLP Embedded-V to VIII Semester with effect from the academic year 2025-26 & onwards.

Hence, the contents of this notification may please be brought to the notice of the students and all the concerned teachers. The prescribed may also be obtained through K.U.website (www.kud.ac.in)


REGISTRAR
18.11.25

To,

1. The Principal, JSS Inst. Of Speech & Hearing, Kelageri Road, Dharwad.
2. The Chairman, Dept. of Physics, Karnatak University, Dharwad.
3. The Deans, Faculty of Science & Technology, Karnatak University, Dharwad.
4. Registrar (Evaluation), Karnatak University, Dharwad.
5. The Directors, College Development Board, Karnatak University, Dharwad.
6. Nodal Officer, UUCMS Cell, K.U.Dharwad.

Copy for information and necessary action to:

1. P.S. to Vice-Chancellor, K.U.Dharwad.
2. S.A. to Registrar, K.U.Dharwad.
3. P.A. to the Registrar(Evaluation), K.U.Dharwad
4. O.S. Exam Confl. / QP / GAD / UG / PG Section, K.U.Dharwad.
5. O.S. CDC Section, K.U.Dharwad.
6. O.S. Academic (PG) Section, K.U.Dharwad.



KARNATAK UNIVERSITY, DHARWAD

Syllabus for

B.ASLP – Embedded (Honours) Programme

Bachelor in Audiology and Speech-Language Pathology

[With effect from the academic year 2022–23]

For V to VIII Semester

AS PER NEP-2020

Karnatak University, Dharwad

Four Years undergraduate Program in Bachelor in Audiology and Speech-
Language Pathology (B.ASLP) Embedded V, VI, VII and VIII Semester

Semester No.	DSC / Type of Course	Theory / Practical	Instruction per week	Total hours of Syllabus / Sem	Duration of Exam	Marks			Credits
						Summative assessment	Formative assessment	Total	
V	DSCT-5.1	Motor Speech Disorders in Children	3	42	2	60	40	100	3
	DSCT-5.2	Structural Anomalies and Speech Disorders	3	42	2	60	40	100	3
	DSCT-5.3	Amplification Devices	3	42	2	60	40	100	3
	DSCT-5.4	Paediatric Audiology	3	42	2	60	40	100	3
	DSCT-5.5	Research Methods and Statistics	3	42	2	60	40	100	3
	DSCP-5.1	Clinical – Speech Language Pathology	9	140	2	50	50	100	3
	DSCP-5.2	Clinical – Audiology	9	140	2	50	50	100	3
Total						400	300	700	21
VI	DSCT-6.1	Motor Speech Disorders in Adults	3	42	2	60	40	100	3
	DSCT-6.2	Language Disorders in Adults	3	42	2	60	40	100	3
	DSCT-6.3	Implantable Hearing Devices and Hearing Aid Fitting	3	42	2	60	40	100	3
	DSCT-6.4	Environmental Audiology	3	42	2	60	40	100	3
	DSCT-6.5	Speech Language Pathology and Audiology in Practice	3	42	2	60	40	100	3
	DSCP-6.1	Clinical – Speech Language Pathology	9	140	2	50	50	100	3
	DSCP-6.2	Clinical – Audiology	9	140	2	50	50	100	3
Total						400	300	700	21

Semester No.	DSC / Type of Course	Theory / Practical	Instruction per week	Total hours of Syllabus / Sem	Marks			Credits
					Summative assessment	Formative assessment	Total	
VII	DSCP-7.1	Clinical – Speech Language Pathology	18	90	100	100	200	11
	DSCP-7.2	Clinical – Audiology	18	90	60	40	200	11
Total					400	300	400	22
VIII	DSCP-8.1	Clinical – Speech Language Pathology	18	90	50	50	200	11
	DSCP-8.2	Clinical – Audiology	18	90	50	50	200	11
Total					400	300	400	22
Total Credits								186

B.ASLP Semester – V
DSCT-5.1 - Motor Speech Disorders in children: 135BLP011

Type of Course	Theory /Practical	Credits	Instruction hours per week	Total No. of Lectures / Hours per Semester	Duration of Exam	Formative Assessment Marks	Summative Assessment Marks	Total Marks
DSCT-5.1	Theory	03	03	42	2 hrs.	40	60	100

Course Outcomes (COs): At the end of the course students will be able to:

CO 1: Describe the characteristics of motor speech disorders in children such as cerebral palsy, childhood apraxia of speech and other childhood dysarthria.

CO 2: Assess the speech and non-speech aspects associated with the above conditions.

CO 3: Plan and execute therapy strategies for children with motor speech disorders.

Unit	Title:	42 hrs. / semester
Unit I	<p>Introduction to Neuromotor Organization and Sensorimotor Control of Speech and Motor Speech Disorders</p> <p>1.1 Central and peripheral nervous system in speech motor control (motor control by cortical, subcortical structures, centrifugal pathways, brainstem, cerebellum and spinal cord).</p> <p>1.2 Neuromuscular organization and control and sensorimotor integration.</p> <p>1.3 Introduction to motor speech disorders in children</p> <ul style="list-style-type: none"> • Motor speech disorders leading to developmental dysarthria. <ul style="list-style-type: none"> - Cerebral palsy - definition, causes, associated problems, and classification. - Syndromes leading to dysarthria (Juvenile progressive bulbar palsy, Congenital supranuclear palsy, Guillain-Barre syndrome, Worster-drought syndrome, Duchenne Muscular dystrophy) • Motor speech disorders leading to developmental apraxia of speech- definition, causes, associated problems, and classification. <p>1.4 High risk registers for neurological conditions.</p>	
Unit II	<p>Nature of Motor speech Disorders in Children</p> <p>2.1 Neuromuscular development in normal children and children with cerebral palsy</p> <p>2.2 Reflex profile</p> <p>2.3 Different types of cerebral palsy</p> <ul style="list-style-type: none"> • Disorders of muscle tone – spasticity, rigidity, flaccidity, atonia • Disorders of movement – Hyperkinesias and dyskinesias – Ballismus, tremor, tic disorder, myoclonus, athetosis, chorea, dystonia, hypokinesias. • Disorders of coordination -Ataxia <p>2.4 Speech and language problems in cerebral palsy</p> <p>2.5 Different types of apraxia- verbal and nonverbal apraxia</p> <p>2.6 Speech and language characteristics in developmental apraxia</p>	
Unit III	<p>Assessment of Motor Speech Disorders in Children</p> <p>3.1 Assessment of speech (acoustic, respiratory, resonatory, prosodic aspects) in cerebral palsy – objective and subjective methods</p> <p>3.2 Assessment of oro-motor aspects and feeding</p> <p>3.3 Assessment of speech in developmental apraxia</p> <p>3.4 Differential diagnosis of motor speech disorders with other developmental</p>	

	speech disorder.	
Unit IV	<p>Management of Motor Speech Disorders in Children</p> <p>4.1 Team approach to rehabilitation and General principles of motor learning</p> <p>4.2 Speech and oro-motor rehabilitation in cerebral palsy</p> <p>Approaches to intervention-Behavioural (vegetative exercises, oral sensorimotor facilitation techniques, compensatory and facilitatory techniques for the correction of respiratory, phonatory, resonatory & articulatory errors) and prosthetic</p> <p>4.3 Feeding intervention in cerebral Palsy.</p> <p>4.4 Motor approaches: Different approaches in neuromuscular education (such as Bobath, Temple Fay, Phelps)</p> <p>4.5 Medical management of cerebral palsy (pharmacological and neurosurgical)</p> <p>4.6 Management of developmental apraxia of speech: specific speech therapy techniques, other approaches</p> <p>4.7 Augmentative and alternative communication (AAC)- Application of AAC methods in children with motor speech disorders in the Indian context, available AAC options (systems and devices), symbol selection (access methods), assessment for AAC candidacy, AAC intervention (team approach in the advocacy of AAC, instructional strategies)</p> <p>4.8 Preventive measures to reduce the neurological conditions.</p>	

Practicum

1. With the help of models, charts, and software, identify the motor control centers in the brain.
2. Perform oro-motor examination in five children and adults and compare.
3. Identify oro-motor reflexes (rooting, suckling, & phase bite) in 5 infants.
4. Demonstrate normal posture and breathing patterns required for varied speech tasks.
5. Alter the postures and breathing patterns and notice changes in speech patterns.
6. Assess DDK rate in five typically developing children.
7. Rate intelligibility of speech in five typically developing children. Discuss factors that influenced speech intelligibility and their ratings.
8. Observe and record (a) physical status, (b) oral sensory motor abilities and vegetative skills, (c) respiration, (d) phonation, (e) resonance, (f) articulation and (g) language abilities in five typically developing children. Compare these with observations made from children with motor speech disorders.
9. Perform oro-motor exercises – isotonic and isometric. Discuss strategies to modify exercises for children.
10. Identify from video the AAC system such as low technology vs high technology systems and different symbol system, that is, Bliss symbols, IICP symbols and different signing systems – Makaton.
11. Observe feeding and swallowing skills in different age groups of children: 2 newborns; 2 infants, 2 toddlers, and 2 older children. Identify the differences in feeding methods, food consistencies, texture, quantity, feeding habits, feeding appliances used by these children.

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DSCT-5.2 - Structural Anomalies and Speech Disorders: 135BLP012

Type of Course	Theory /Practical	Credits	Instruction hour per week	Total No. of Lectures / Hours per Semester	Duration of Exam	Formative Assessment Marks	Summative Assessment Marks	Total Marks
DSCT-5.2	Theory	03	03	42	2 hrs.	40	60	100

Course Outcomes (COs): At the end of the course students will be able to:

CO1: Evaluate and diagnose the speech characteristics seen in these disorders.

CO2: Learn about the techniques for the management of speech disorders in these conditions.

Unit	Title:	42 hrs./ semester
Unit I	<p>Introduction to Cleft Lip and Palate and Associated Problems</p> <p>1.1 Embryology – development of the palate</p> <p>1.2 Causes – genetic, environmental, and other causes</p> <p>1.3 Types of cleft lip and palate and classification of cleft lip and palate</p> <p>1.4 Communication disorders: language and hearing</p> <ul style="list-style-type: none"> • Feeding, psychological, and dental problems • Syndromes associated with cleft lip and palate 	
Unit II	<p>Velopharyngeal Dysfunction and Assessment</p> <p>2.1 Velopharyngeal closure mechanism: Normal Physiology and types of different velopharyngeal closure</p> <p>2.2 Velopharyngeal Dysfunction (VPD)</p> <ul style="list-style-type: none"> • Definition causes and classification. • Effect of VPD on speech • Assessment of VPD: Subjective and objective methods (Direct measures– Videofluoroscopy, MRI, CT, Cephalometric images, Cineradiography, Nasopharyngoscopy; Indirect measures – TONAR, Nasometry, NVS, Nasal View, ZIPPO, PERCI, Pressure flow technique, Rhinomanometry). 	
Unit III	<p>Assessment and Management of CLP</p> <p>3.1. Assessment of cleft lip/palate: Cleft palate Perceptual protocols</p> <p>3.2. Management of cleft lip and palate – surgery, speech therapy, prosthesis</p> <p>3.3. Speech and language therapy for CLP: early intervention, therapy techniques to improve language, speech therapy techniques to reduce compensatory articulation, speech therapy methods to improve resonance and speech intelligibility.</p>	
Unit IV	<p>Types of Oral and Laryngeal Cancer and Management</p> <p>4.1 Definition, Causes and symptoms of laryngeal cancers.</p> <p>4.2 Total laryngectomy – definition, characteristics, associated problems</p> <p>4.3 Types of glossectomy and mandibulectomy</p> <p>4.4 Assessment of patients with laryngectomy, glossectomy, mandibulectomy</p> <p>4.5 pre-and post-operative counselling</p> <p>4.6 Esophageal speech – anatomy, candidacy, different types of air intake procedure, speech characteristics in esophageal speech</p> <p>4.7 Tracheo-Esophageal Speech – anatomy, candidacy, different types of TEP, fitting of prosthesis, speech characteristics, complications in TEP.</p> <p>4.8 Artificial larynx – different types, selection of artificial larynx, ultra- speech, speech characteristics.</p>	

	4.9 Gastric pull up – issues and management. 4.10 Glossectomy, mandibulectomy–management	
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Practicum

1. Identify the different types of cleft lip and palate by looking at illustrations and images.
2. Listen to 10 speech samples of children with cleft lip and palate and rate their nasality/ speech (articulation and cleft type errors) based on universal reporting parameters.
3. Identify the type of closure of velopharyngeal port for 5 normal individuals and 5 individuals with cleft lip and palate using videos of nasoendoscopy/ videofluoroscopy.
4. Perform oral peripheral mechanism examination on 10 individuals and document the structure and functions of the articulators.
5. Analyse the different types of occlusions in 10 individuals.
6. Identify the type of glossectomy by looking at pictures/illustrations.
7. Identify the different types of prosthesis in the management of head and neck cancer.
8. Analyse the speech profile of 5 individuals with laryngectomy.
9. Identify parts of an artificial larynx and explore its use.
10. Prepare a checklist / pamphlet illustrating care of the stoma and T- tubes in vernacular.

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DSCT-5.3 – Amplification Devices: 135BLP013

Type of Course	Theory /Practical	Credits	Instruction hour per week	Total No. of Lectures/Hours /Semester	Duration of Exam	Formative Assessment Marks	Summative Assessment Marks	Total Marks
DSCT-5.3	Theory	03	03	42	2 hrs.	40	60	100

Course Outcomes (COs): At the end of the course students will be able to:

- CO 1: Identify different types of hearing aids and explain their components.
 CO 2: Carry out Electro-acoustic measurement and categorize the hearing aids accordingly.
 CO 3: Describe different signal processing strategies and their relevance in different listening conditions.
 CO 4: Cross check whether the hearing aids meet the standards.

Unit	Title:	42 hrs. / semester
Unit I	Basics and Classifications of Hearing Aids 1.1 Historical development of hearing aids-mechanical, analogue, digital hearing aid 1.2 Basic components of hearing aids –microphones, amplifier, receiver/vibrator, cords, volume control, telecoil, and batteries. 1.3 Body level, ear level hearing aids (BTE, ITE, ITC, CIC, IIC, RIC, RITE) 1.4 Analogue, Programmable and Digital Hearing aid 1.5 Binaural, pseudo-binaural, mono-aural 1.6 Master hearing aids 1.7 Modular hearing aids 1.8 Group Amplification – hard wire, induction loop, FM, infrared	
Unit II	Signal Processing in Hearing Aids 2.1 Artificial Intelligence in Hearing aids 2.2 Signal processing in hearing aids - BILL, TILL PILL 2.3 Signal enhancing technology- Digital Noise reduction, Directionality of Microphones, Speech cue enhancement	
Unit III	Compression in Hearing Aids and other Signal Processing 3.1 Output limiting: peak clipping, compression (Input/output compression, compression ratio, compression knee point, WDRC, Compression limiting, high level compression, low level compression), Expansion Hearing Aid. 3.2 Extended low frequency amplification, frequency lowering techniques. 3.3 Routing of signals, head shadow/baffle/ diffraction effects	
Unit IV	Electro-acoustic Measurement of Hearing aids 4.1 Electro-acoustic measurements for hearing aids Purpose, parameters, instrumentation, procedure (analogue and digital), variables affecting EAM. 4.2 Standards on Electro-acoustic measurements of Hearing aids (BIS, IEC and ANSI standards). 4.3 Environmental tests for Hearing aids	

Practicum

- Listen to the output of different types and classes of hearing aids (monaural, binaural, analog, digital hearing aids), in different settings.
- Troubleshoot hearing aids: Check the continuity of the receiver cord using multimeter, measure the voltage of different sized batteries using multi meter, Check voltage of batteries different types and sizes.
- Carry out electroacoustic measurements for the body level and ear level hearing aids.

4. Program the hearing aid for different configuration and degrees of hearing loss (at least 5 different audiograms) using different prescriptive formulae.
5. Program the hearing aid for different listening situations (at least 3 different situations)
6. Vary the compression settings in a digital hearing aid and note down the differences in the output.
7. Perform real ear insertion measurements using different hearing aids (body level and ear level, hearing aids of different gains)
8. Compare speech perception through conventional BTE and RIC hearing aids using a rating scale.
9. Observe assistive listening devices such as telephone amplifier, vibro-tactile alarms, note down the candidacy and their utility.

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DSCT-5.4 – Pediatric Audiology: 135BLP021

Type of Course	Theory /Practical	Credits	Instruction hour per week	Total No. of Lectures / Hours per Semester	Duration of Exam	Formative Assessment Marks	Summative Assessment Marks	Total Marks
DSCT-5.4	Theory	03	03	42	2 hrs.	40	60	100

Course Outcomes (COs): At the end of the course students will be able to:

CO1: Describe auditory development.

CO2: List etiologies and relate them to different types of auditory disorders that may arise.

CO3: Explain different hearing screening/identification procedures and their application.

CO4: Elaborate on different aspects of pediatric behavioral and physiological/electrophysiological evaluation.

Unit	Title:	42 hrs. / semester
Unit I	<p>Development of Human Auditory System</p> <p>1.1. Introduction to pediatric audiology and basic terminologies.</p> <p>1.2. Embryological development of the human auditory and vestibular systems, and the relevance of this information with special reference to syndromes.</p> <p>1.3. Maturation of the auditory nervous system and its relevance in pediatric hearing.</p> <p>1.4. Development of auditory behavior – prenatal hearing, newborn hearing, auditory development (minimum response level, localization, perception of speech, need for multiple cues).</p>	
Unit II	<p>Early Identification of Hearing Loss and Hearing Screening</p> <p>2.1 Need for early identification with special reference to conductive and sensorineural hearing loss, mild hearing losses, sloping hearing losses, fluctuating hearing losses and unilateral hearing loss.</p> <p>2.2 Recommendations of the Joint committee on infant screening- various position statements showing its evolution.</p> <p>2.3 High risk registers and its utility in early identification.</p> <ul style="list-style-type: none"> • Commonly used high risk registers • Sensitivity and specificity • Relevance in Indian scenario <p>2.4 Universal newborn hearing screening- concept, history, present scenario and hurdles.</p> <p>2.5 Behavioral screening tests (awakening test, bottle feeding test, behavioral observation audiometry) stimuli, procedures, recording of response, interpretation of results.</p> <p>2.6 Objective screening tests (e.g., Crib-O Gram, auditory cradle, accelerometer recording system, reflex inhibition audiometry, immittance, reflectometry, wide-band reflectance, OAE, evoked potentials).</p> <ul style="list-style-type: none"> • School screening • Screening for hearing sensitivity- behavioral and objective tests. • Screening for (C)APD- Need, tests used (checklists & behavioral screening tests). 	

Unit III	Diagnostic Evaluations- Behavioral Tests Behavior observation audiometry 3.1 Conditioning techniques: <ul style="list-style-type: none"> • Visual reinforcement audiometry and its modifications including CORA. • PIWI and peep show audiometry • TROCA • Play audiometry. 3.2 Modifications required for multiple disabilities. 3.3 Speech audiometry <ul style="list-style-type: none"> ▪ Modification required while carrying out speech audiometry in children. ▪ Speech detection threshold ▪ Speech recognition threshold ▪ Speech recognition scores – PBK, WIPI, NU Chip, Early speech perception test, Ling’s six sound tests, auditory number test, tests available in Indian languages ▪ BC speech audiometry. 3.4 Functional hearing loss- signs & symptoms and tests used. 3.5 Balance assessment: need, causes, behavioral tests.	
Unit IV	Diagnostic Evaluations- Objective tests 4.1 Immittance evaluation- including high frequency probe-tone, tympanometry, reflexometry, wide-band reflectance. 4.2 OAEs (TEAOAE & DPOAE) 4.3 Evoked potentials (ABR, ASSR & ALLR) 4.4 Objective tests for vestibular assessment (cVEMP, oVEMP, vHIT, Calorics & tests for central vestibular assessment).	

Practicum

1. Observe a child with normal hearing (0-2 years) in natural settings. Write a report on his/her responses to sound.
2. Observe a child with hearing impairment (0-2 years) in natural settings. Write a report on his/her responses to sound with and without his amplification device.
3. Administer HRR on at least 3 newborns and interpret responses.
4. Based on the case history, reflect on the possible etiology, type and degree of hearing loss the child may have.
5. Compare ABR wave forms in children of varying ages from birth to 24 months.
6. Observe live or video of BOA/VRA of a child with normal hearing and hearing loss and write a report on the instrumentation, instructions, stimuli used, procedure and interpretation.
7. Observe OAE in a child with normal hearing and a child with hearing loss. Write a report on the instrumentation, protocol used and interpretation.
8. Observe ABR in a child with normal hearing and a child with hearing loss. Write down a report on the instrumentation, protocol used and interpretation.
9. Observe immittance evaluation in a child with normal hearing and a child with hearing loss. Write a report on the instrumentation, protocol used and interpretation.
10. Using role play demonstrates how the results of audiological assessment are explained to caregivers in children with the following conditions.
 - Child referred in screening and has high risk factors in his history.
 - Child with chronic middle ear disease
 - Child with CAPD
 - Child with severe bilateral hearing impairment

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DSCT-5.5 – Research Methods and Statistics: 135BLP061

Type of Course	Theory /Practical	Credits	Instruction hour per week	Total No. of Lectures / Hours per Semester	Duration of Exam	Formative Assessment Marks	Summative Assessment Marks	Total Marks
DSCT-5.5	Theory	03	03	42	3 hrs.	40	60	100

Course Outcomes (COs): At the end of the course, students will be able to:

CO1: Basic concept of research in the field of audiology and speech-language pathology

CO 2: Design and execution of research

CO3: Ethical guidelines for conducting research.

Unit	Title:	42 hrs. / semester
Unit I	<p>Introduction to Research Methods</p> <p>1.1 Meaning and purpose of research: meaning. 1.2 Need for research in audiology and speech-language pathology 1.3 Funds/grants for research 1.4 Steps in research: identification, selection 1.5 Formulation of research questions: aims, objectives, statement of problem, hypothesis 1.6 Types of variables; types of sampling procedures (random and non-random); 1.7 Types/ methods of data collection and their advantages and disadvantages 1.8 Reliability and validity (internal and external validity)</p>	
Unit II	<p>Research Design in Audiology and Speech-Language Pathology</p> <p>2.1 Types of research: survey, ex-post facto research, normative research, standard-group comparison 2.2 Experimental and quasi experimental research: group design & single subject design; Between groups vs. repeated measures design 2.3 Epidemiologic data sources and measurements 2.4 Epidemiologic methods – questionnaire survey, screening, personal survey, testing 2.5 Media - their advantages and disadvantages 2.6 Incidence and prevalence of hearing, speech, language disorders as per different census (NSSO, WHO) 2.7 Internal and external validity of research 2.8 Documentation of research: scientific report writing, different formats or styles (APA, AMA, and MLA), 2.9 Ethics of research</p>	
Unit III	<p>Introduction to Statistics and Data Collection</p> <p>3.1 Application of statistics in the field of Audiology and speech-language pathology. 3.2 Scales of measurement: nominal, ordinal, interval, ratio 3.3 Classification of data: class intervals, continuous and discrete measurement 3.4 Normal distribution: general properties of normal distribution, theory of probability, area under normal probability curve 3.5 Variants from the normal distribution: skewness and kurtosis 3.6 Measure of central tendency: mean, median, mode</p>	

Unit IV	Statistics and Research Designs 4.1 Choosing statistics for different research designs. 4.2 Correlational techniques: Pearson's Product Moment Correlation Coefficient. 4.3 Spearman's Rank order correlation coefficient 4.4 Statistical inference: concept of standard error and its use; the significance of statistical measures; testing the significance of difference between two meansz-test, t-test; analysis of variance, post hoc tests. 4.5 Non-parametric tests: Chi-square test, Wilcoxon test, Mann-Whitney Utest 4.6 Reliability and validity of test scores: reliability and validity, Item analysis 4.7 Analysis of qualitative data 4.8 Software for statistical analysis	
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DSCP-5.1 – Clinical (Speech-Language Pathology): 135BLP014

Type of Course	Theory /Practical	Credits	Instruction hour/week	Total No. of Lectures / Hours per Semester	Duration of Exam	Formative Assessment Marks	Summative Assessment Marks	Total Marks
DSCP-5.1	Practical	03	09	140	2 hrs.	50	50	100

Course Outcomes (COs): At the end of the course students will be able to:

CO1: know (concepts), know how (ability to apply), show (demonstrate in a clinical diary/logbook based on clinical reports/recordings, etc.), and do (perform on patients/ client contacts) the following.

Know:

1. Differential diagnosis of motor speech disorders in children.
2. Procedures to assess individuals with cleft lip and palate, and other oro-facial structural abnormalities.
3. Procedures to assess laryngectomy and provide management options.

Know-how:

1. To administer at least two more (in addition to earlier semesters) standard tests for childhood language disorders.
2. To assess posture and breathing for speech in children with motor speech disorders.
3. To consult with inter-disciplinary medical/rehabilitation team and counsel the individual/family regarding management options and prognosis.

Show:

1. Rating of cleft, speech intelligibility and nasality—minimum of 2 individuals with cleft lip and palate.
2. Language assessment - minimum of 2 individuals with cleft lip and palate.
3. Assessment of rate of speech on various speech tasks – at least on 2 children & adults.

Do:

1. Oral peripheral examination on minimum of 2 individuals with cleft lip and palate.
2. Apply speech language stimulation/therapy techniques on 5 children with language disorders / speech sound disorders / motor speech disorders – minimum 5 sessions of therapy for each child.

DSCP-5.2 – Clinical (Audiology): 135BLP061

Type of Course	Theory /Practical	Credits	Instruction hour/week	Total No. of Lectures / Hours per Semester	Duration of Exam	Formative Assessment Marks	Summative Assessment Marks	Total Marks
DSCP-5.2	Practical	03	09	140	2 hrs.	50	50	100

Course Outcomes (COs): At the end of the course students will be able to:

General considerations:

- Exposure is primarily aimed to be linked to the theory courses covered in the semester, however, not just limited to these areas.
- After completion of clinical postings in auditory diagnostics and auditory rehabilitation, the student will Know (concept), know how (ability to apply), show (demonstrate in a clinical diary/logbook), and do (perform on patients/ client contacts) the following:

Know:

1. Different protocols in tympanometry and reflexometry.
2. Different protocols used in auditory brainstem responses.
3. Protocols for screening and diagnostic otoacoustic emissions
4. Tests to assess vestibular system.
5. Different indications for selecting implantable hearing devices.
6. Various speech stimulation and auditory training techniques

Know-how:

1. To administer auditory brainstem responses for the purpose of threshold estimation and site of lesion testing
2. To administer high frequency tympanometry and calculate resonance frequency.
3. To administer high risk register
4. To modify the given environment to suit the needs of hearing impairment.

Show:

1. Analysis of ABR waveforms – threshold estimation 5 and site of lesion 5
2. Analysis of immittance audiometry and relating to other tests – 5 individuals with conductive and 5 individuals with sensory-neural hearing loss
3. How to formulate select appropriate auditory training technique based on audiological evaluation.

Do:

1. Threshold estimation on 5 infants (< 2 years)

2. TEOAE and DPOAE on 5 infants (<2 years)
3. BOA on 5 infants (<2 years)
4. VRA on 2 infants (6 month – 3 year)
5. Conditioned play audiometry – 3 children (3-6 years)
6. Hearing aid fitment on 1 infant (< 3 years) 2 children (3-6 years)
7. Listening age of 3 children with hearing impairment
8. Appropriate auditory training on 5 children with hearing loss

B.ASLP Semester–VI
DSCT-6.1 – Motor Speech Disorders in Adults: 136BLP011

Type of Course	Theory /Practical	Credits	Instruction hour per week	Total No. of Lectures / Hours per Semester	Duration of Exam	Formative Assessment Marks	Summative Assessment Marks	Total Marks
DSCT-6.1	Theory	03	03	42	2 hrs.	40	60	100

Course Outcomes (COs): At the end of the course students will be able to:

CO1: Understand the characteristics of acquired motor speech disorders in adults.

CO2: Evaluate and diagnose speech characteristics in acquired motor speech disorders.

CO3: Learn about the techniques for the management of speech and related errors in acquired motor speech disorders.

Unit	Title:	42 hrs. / semester
Unit I	<p>Introduction to Motor Speech Disorders in Adults</p> <p>1.1 Dysarthria in adults:</p> <ul style="list-style-type: none"> • Definition and different classification systems of dysarthria in adults • Types of dysarthria in adults and their neurological bases • Non speech and speech characteristics in different types of dysarthria • Acoustic and physiological findings in different types of dysarthria. <p>1.2 Apraxia of speech in adults (AOS):</p> <ul style="list-style-type: none"> • Definition of verbal and nonverbal apraxia of speech. • Different types of apraxia in adults and their neurological bases. • Non speech and speech characteristics of AOS. • Acoustic and physiologic findings in AOS. <p>1.3 Physiology of normal swallow and its characteristics in different neurological conditions such as ALS, Parkinson’s disease, Huntington’s disease, multiple sclerosis, apraxia.</p>	
Unit II	<p>Etiologies of Dysarthria and Apraxia of Speech</p> <p>2.1. Common causes leading to any of the dysarthria and apraxia: Traumatic brain injury (TBI), Cerebrovascular accident (CVA), Infections such as meningitis, encephalitis, and HIV, Neoplasms, Toxic agents, Ischemic brain damage, Hypoxic ischemic encephalopathy, Cerebral infarction, Intracranial hemorrhage, subarachnoid hemorrhage.</p> <p>2.2. Common neurogenic conditions leading to dysarthria.</p> <ul style="list-style-type: none"> • Flaccid dysarthria: Muscular dystrophy, polymyositis, myasthenia gravis, poliomyelitis, polyneuritis (Guillian-Barresyndrome) • Ataxic dysarthria: Ataxic telangiectasia, Von-Hippel Lindau disease, Freidrich’s ataxia • Hypokinetic dysarthria: Parkinson’s disease • Hyperkinetic dysarthria: Tardive dyskinesia, Huntington’s and Syndenham’s chorea, Meige syndrome, Tourette’s syndrome. • Mixed dysarthria: Motor neurone disease [Amyotrophic multiple sclerosis (ALS), Primary lateral sclerosis (PLS), Progressive bulbarand pseudobulbar palsy], Corticobasal Degeneration (CBD), Wilson’s disease, Neurosyphilis. 	

Unit III	<p>Assessment of Dysarthria and Apraxia of Speech</p> <p>3.1 Assessment of dysarthria</p> <ul style="list-style-type: none"> • Perceptual analysis – examination of the speech systems during speech and nonspeech (oro-motor and oro-sensory) activities, standard tests and methods, speech intelligibility assessment scales. • Instrumental analysis-Aerodynamic, Electromyographic, Kinematic, Acoustic <p>3.2 Advantages and disadvantages of instrumental and perceptual analysis of speech.</p> <p>3.3 Assessment of apraxia of speech-standard tests and scales, subjective methods and protocols.</p> <p>3.4 Differential diagnosis of dysarthria from functional articulation disorders, apraxia of speech, aphasia and allied disorders.</p> <p>3.5 Evaluation of swallowing disorders (Dysphagia)- An overview to subjective and objective methods.</p>	
Unit IV	<p>Management of Dysarthria and Apraxia of Speech</p> <p>4.1 Management of dysarthria–</p> <ul style="list-style-type: none"> • General intervention principles • Behavioural approaches (vegetative exercises, oral sensorimotor facilitation techniques, compensatory and facilitatory techniques for the correction of respiratory, phonatory, resonatory, articulatory & prosodic errors) • Prosthetic and medical (surgical and pharmacological approaches). <p>4.2 Management of apraxia of speech- principles of motor learning, different behavioral management approaches including articulatory kinematic approaches, rate and /or rhythm approaches.</p> <p>4.3 Application of Augmentative and Alternative Communication (AAC) systems for adult dysarthric and apraxic individuals –assessment for AAC candidacy, choosing an appropriate system and technique, training communication partners, generalization of learning and effective use of AAC in adult dysarthrics and apraxics.</p> <p>4.4 Management of swallowing disorders (Dysphagia) – An overview to rehabilitative and compensatory approaches.</p>	

Practicum

1. Identify the cranial nerves and mention its origin and insertion from a picture/model.
2. Demonstrate methods to assess the cranial nerves.
3. Assess the respiratory system using speech and non-speech tasks in 10 healthy adults.
4. Assess the phonatory system using subjective and acoustic analysis in 10 healthy adults.
5. Looking at a video identify the clinical signs and symptoms of different neurological conditions resulting in Dysarthria.
6. Record the speech sample of 5 normal adults and compare with the audio sample of individuals with Dysarthria.
7. Administer Duffy's intelligibility rating scale on 5 healthy adults.
8. Administer Frenchay's Dysarthria Assessment on 5 healthy adults.
9. Demonstrate activities to improve the functions of speech subsystem.
10. Identify the signs of UMN and LMN based on a video.
11. Prepare a low tech AAC for functional communication for an individual with apraxia.

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DSCT-6.2 – Language Disorders in Adults: 136BLP012

Type of Course	Theory /Practical	Credits	Instruction hour per week	Total No. of Lectures / Hours per Semester	Duration of Exam	Formative Assessment Marks	Summative Assessment Marks	Total Marks
DSCT-6.2	Theory	03	03	42	2 hrs.	40	60	100

Course Outcomes (COs): At the end of the course students will be able to:

CO1: Understand the characteristics of adult language disorders.

CO2: Evaluate and diagnose speech characteristics in adults with language disorders.

CO3: Learn about the techniques for the management of speech and related errors in language disorders seen in adults.

Unit	Title:	42 hrs. / semester
Unit I	<p>Neurosciences of Adult Language Disorders & Aphasiology</p> <p>1.1 Neuroanatomical, neurophysiological, and neurochemical correlates for language function</p> <p>1.2 Neurolinguistic models and language processes – connectionists, hierarchical, global, process and computational models</p> <p>1.3 Historical aspects of aphasia</p> <p>1.4 Definitions, causes, classifications (cortical and subcortical aphasias), approaches to classification systems, types of aphasia- speech, language, behavioral and cognitive characteristics of varieties of aphasia</p>	
Unit II	<p>Non-Aphasic Language Disorders/ Cognitive Communication Disorders in Adults</p> <p>A brief overview of Speech, language characteristics in</p> <ul style="list-style-type: none"> • TBI (Traumatic Brain Injury) - Trauma to the CNS – subdural haematoma, epidural haematoma, parenchymal brain damages • RHD (Right Hemisphere Damage) • Dementia • PPA (Primary Progressive Aphasia) • Schizophrenia • Metabolic disorders • Alcohol induced disorders. 	
Unit III	<p>Assessment of Aphasia and Other Cognitive Communication Disorders</p> <p>3.1 Assessment of cognitive-linguistic behavior of adults with aphasia – Screening, Diagnostic and performance assessment tools (Scoring, interpretation, and rationale) –BST, WAB, RTT, BAT, LPT, CLAP, CLQT.</p> <p>3.2 Assessment of speech, language, linguistic and cognitive behavior of adults with non-aphasic language disorders/ Cognitive communication disorders – MMSE, ABCD, CLAP, CLQT.</p> <p>3.3 Reflections on approaches to assessment in bi/multilingual situation.</p> <p>3.4 Theories of spontaneous recovery and prognostic indicators of aphasia and other cognitive-communication disorders.</p>	

Unit IV	Intervention Strategies for Aphasia and Cognitive-Communication Disorders 4.1 Principles of language intervention 4.2 Speech-Language Management Approaches- Deblocking, VCIU, LOT, MAAT, PACE, Stimulation Facilitation Approach, RET, VAT, Semantic Feature Analysis, TAP, TUF. 4.3 Team approach in rehabilitation of adult language disorders 4.4 Counseling and home management for aphasia and other cognitive-communication disorders. 4.5 Rights of persons with aphasia.	
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Practicum

1. Identify different lobes of in the brain by looking at a model/ image and label the language areas.
2. Administer a standardized test battery on 3 normal individuals to assess language and cognition.
3. Administer bilingual aphasia test on 3 healthy normal adults.
4. List the language characteristics in different types of aphasia from a video.
5. Analyse the speech, linguistic and non-linguistic features seen in Right hemisphere damaged individual from a video.
6. In a given brain model mark the subcortical structures involved in language processing/production.
7. Demonstrate various facilitatory and compensatory therapy techniques in the management of aphasia.
8. Formulate activities to assess linguistic abilities in dementia and aphasia.
9. Counsel by a role play for a given profile of an individual with adult language disorder.
10. Prepare a counselling checklist /guideline that can be used with the family members of an individual with aphasia and traumatic brain injury.

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DSCT-6.3 – Implantable Hearing Devices and Hearing Aid Fitting: 136BLP014

Type of Course	Theory /Practical	Credits	Instruction hour per week	Total No. of Lectures / Hours per Semester	Duration of Exam	Formative Assessment Marks	Summative Assessment Marks	Total Marks
DSCT-6.3	Theory	03	03	42	2 hrs.	40	60	100

Course Outcomes (COs): At the end of the course students will be able to:

CO1: Select hearing aids based on preselection factors and appropriate tests.

CO2: Select different assistive listening devices.

CO3: Take ear impression and prepare the ear mould.

CO4: Decide candidacy and select appropriate implantable device.

CO5: Troubleshooting hearing aids and counsel.

Unit	Title	42 hrs. / semester
Unit I	Hearing Aid Selection and Fitting 1.1 Pre-selection factors 1.2 Selection and programming of linear and non-linear digital hearing aids using prescriptive and comparative procedures. 1.3 Verification using functional gain and insertion gain methods. 1.4 Use of impedance, OAEs and AEPs	
Unit II	Hearing Aid Fitting in Different Population, Assistive Listening Devices and Outcome Measures 2.1 Hearing aids for conductive hearing loss 2.2 Hearing aids for children 2.3 Hearing aids for elderly 2.4 Outcome measures of Hearing aid benefits 2.5 Assistive listening devices – types and selection	
Unit III	Implantable Hearing Devices 3.1 Middle ear implants Implantable hearing aids- Types components, Types, components, surgical approaches, risks, complications, candidacy, and contraindications 3.2 Implantable bone conduction devices- Types, components, surgical approaches, risks, complications, candidacy, and contraindications 3.3 Cochlear implants- Components, terminology, speech coding strategies, candidacy, contra- indications, advantages and complications, Mapping and issues related to CI. 3.4 Overview of Brainstem and Midbrain implants	
Unit IV	Mechano-Acoustic Couplers, Counseling and Troubleshooting Types of ear moulds 4.1 Various procedures of making different types of ear moulds. 4.2 Various modifications of ear moulds and its effect on acoustic characteristics 4.3 Counseling on care and Maintenance of ear moulds. 4.4 Counseling on care, maintenance and troubleshooting of hearing aids and implantable vices. 4.5 Troubleshooting of hearing devices.	

Practicum

1. Administer a questionnaire to assess hearing aid benefit on 2 persons using hearing aids.
2. Carry out a role play activity of counseling a hearing aid user
3. Ear Molds
 - Take impression for the ear mold using different techniques, different methods and using different materials.
 - Make hard mold for any 2 ears.
 - Make soft mold for any 2 ears.
 - Make vent in hard molds you made.
4. Watch videos of BAHA, middle ear implant, cochlear implant
5. Create hypothetical cases (at least 5 different cases) who are candidates for cochlear implantation. Make protocol for recording an EABR.
6. List down the technological differences across different models of cochlear implants from different companies, their cost
7. Observation of mapping
8. Watching of videos on AVT
9. Watch video on cochlear implant surgery

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DSCT-6.4 – Environmental Audiology: 136BLP021

Type of Course	Theory /Practical	Credits	Instruction hour per week	Total No. of Lectures / Hours per Semester	Duration of Exam	Formative Assessment Marks	Summative Assessment Marks	Total Marks
DSCT-6.4	Theory	03	03	42	2 hrs.	40	60	100

Course Outcomes (COs): At the end of the course students will be able to:

CO 1: Explain the effects of noise on various systems in the body, with special reference to auditory system.

CO 2: Select appropriate test/s and assess the effects of occupational noise.

CO 3: Independently assess various kinds of noise in the environment and its possible effects.

CO 4: Identify people at-risk of developing occupational hearing loss and plan effective hearing conservation program.

CO 5: Assess eligibility for compensation in individuals with NIHL.

Unit	Title	42 hrs./ semester
Unit I	<p>Overview, Types and Effects of Environmental Noise-14 Hrs</p> <p>1.1 Definition of noise, sources –community, industrial, music, traffic and others, types – steady and non-steady</p> <p>1.2 Effects of noise:</p> <ul style="list-style-type: none"> • Auditory effects of noise exposure: Historical aspects, TTS, factors affecting TTS, recovery patterns, PTS, Histopathological changes, Effect on communication, SIL, AI, Noy, PNdB, PNL, EPNL, NC curves, NRR, SNR. Effects on central auditory processing. • Non-auditory effects of noise exposure: Physiological/somatic including vestibular effects, psychological responses, stress and health, sleep, audio- analgesia effects on CNS and other senses, effects on work efficiency and performance. 	
Unit II	<p>Audiological Evaluation of Individuals Exposed to Occupational Noise</p> <p>2.1 Case history</p> <p>2.2 Audiometry in NIHL Pure tone audiometry</p> <ul style="list-style-type: none"> • Hearing screening • Baseline and periodic monitoring tests, brief tone audiometry, correction for presbycusis • Testing environment • Extended high frequency audiometry • Speech audiometry • Speech perception tests in quiet and in presence of noise <p>2.3. Other audiological evaluations: immittance evaluation, AEP, OAE, Tests for susceptibility.</p>	

<p>Unit III</p>	<p>Noise and Vibration Measurements</p> <p>3.1 Instrumentation</p> <p>3.2 Procedure for indoor and outdoor measurement of ambient noise, noise survey, traffic noise, aircraft noise, community noise and industrial noise</p> <p>3.3 Factors affecting noise and vibration measurement.</p> <p>3.4 Reporting noise measurement including noise mapping.</p> <ul style="list-style-type: none"> • DRC – definition, historical aspects, use of TTS and PTS, information in establishing DRC. • CHABA, AFR 160-3, AAOO, damage risk contours, Walsh-Healey Act, OSHA, EPA, Indian noise standards for firecrackers <p>3.5 Claims for hearing loss: Fletcher point-eight formula, AMA method, AAOO formula, California variation in laws, factors in claim evaluation, variations in laws and regulations, date of injury, evaluation of hearing loss, number of tests</p> <p>3.6 Indian acts/regulations.</p>	
<p>Unit IV</p>	<p>Hearing Conservation</p> <p>4.1 Need for hearing conservation program.</p> <p>4.2 Steps in hearing conservation program</p> <p>4.3 Noise control: Engineering and administrative controls</p> <p>4.4 Hearing protective device (HPDs)</p> <ul style="list-style-type: none"> • Types: ear plugs, earmuffs, helmets, special hearing protectors, merits and demerits of each type • Properties of HPDs: attenuation, comfort, durability, stability, temperature, tolerance • Outcome measures and evaluation of attenuation characteristics of HPDs <p>4.5 Noise conditioning/ Toughening</p>	

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DSCT-6.5– Speech-Language Pathology and Audiology in Practice: 136BLP101

Type of Course	Theory /Practical	Credits	Instruction hour per week	Total No. of Lectures / Hours per Semester	Duration of Exam	Formative Assessment Marks	Summative Assessment Marks	Total Marks
DSCT-6.5	Theory	03	03	42 hrs.	2 hrs.	40	60	100

Course Outcomes (COs): At the end of the course students will be able to:

CO 1: List and describe the highlights of legislations relating to speech and hearing disabilities. Incorporate ethical practices in professional activities.

CO 2: Provide information on the facilities available for the speech and hearing disabled including welfare measures and policies of government.

CO 3: Describe different strategies to create awareness of speech and hearing impairment and facilities available to take care of them.

CO 4: Familiarizing different clinical setups for the rehabilitation of speech and hearing disorders, with reference to their requirement, protocols and role and responsibility of the professionals.

CO 5: Familiarizing terminology, technology and methods used in public education, clinical practice including tele practice and camps.

CO 6: And their application in speech and hearing service delivery.

Unit	Title	42 hrs. / semester
Unit I	<p>Introduction to the Speech –Language Pathology and Audiology in Practice</p> <p>1.1 Epidemiology of speech and hearing disorders</p> <p>1.2 Need for rehabilitation and steps involved in rehabilitation.</p> <p>1.3 ICD and ICF</p> <p>1.4 Levels of prevention: Primary, secondary and tertiary</p> <p>1.5 National programs and efforts by the professionals including India in the process of rehabilitation.</p> <p>1.6 Organizing camps, screening (need, purpose, planning, organizing, and conducting including providing remedial measures to the needy)</p> <p>1.7 Public education and information (media, radio broadcasts, street plays)</p> <p>1.8 Functions of speech & hearing centers in different set-ups</p> <p>1.9 Private practice, evidence-based practice, Government organizations, NGOs</p> <p>1.10 Role of itinerant speech therapist, anganwadis, resource teachers etc.</p> <p>1.11 Community based rehabilitation and other methods of integration of the disabled in the society.</p>	
Unit II	<p>Public Laws Related to Disability</p> <p>2.1 Scope of practice in speech and hearing (National & International bodies)</p> <p>2.2 Professional ethics</p> <p>2.3 Rehabilitation Council of India and Disability related acts in India</p> <p>2.4 Consumer protection Act and other public laws.</p> <p>2.5 Disability related Acts pertaining to Education and welfare of persons with disability in international perspective-UNCRPD.</p>	

	<p>2.6 Welfare measures available for persons with speech language and hearing disability</p> <p>2.7 Certification of persons with speech language and hearing disability</p> <p>2.8 Concept of barrier free access and universal design relating to individuals with speech and hearing impairment</p>	
Unit III	<p>Organization and Administration of Speech-Language and Hearing Centers and Public Education</p> <p>3.1 Setting up a speech-language and hearing center.</p> <p>3.2 Organization of space, time, personnel, and audiometric rooms.</p> <p>3.3 Budgeting and, financial management</p> <p>3.4 Purchase formalities</p> <p>3.5 Recruiting personnel – rules and salary</p> <p>3.6 Leave rules and other benefits for professionals and personnel</p> <p>3.7 Documents and record keeping – different types.</p> <p>3.8 Public education methods</p> <p>3.9 Organizing workshops, seminars, and conferences.</p>	
Unit IV	<p>Scope and Practice of Tele-Assessment & -Rehabilitation</p> <p>4.1 Introduction to tele-health: definition, history of tele-health</p> <p>4.2 Terminologies-tele-health, tele medicine, tele practice</p> <p>4.3 Connectivity: internet, satellite, mobile data</p> <p>4.4 Methods of tele-practice-store and forward and real time</p> <p>4.5 Ethics and Regulations for tele practice</p> <p>4.6 Requirements/Technology for tele- practice: Web based platforms, Video conferencing, infrastructure.</p> <p>4.7 Manpower at remote end and speech-language pathologist/audiologist end, training assistants for tele-practice</p> <p>4.8 Audiological screening using tele-technology: newborn hearing screening, school screening, community screening, counselling.</p> <p>4.9 Diagnostic services using tele-technology: video otoscopy, pure tone audiometry, speech audiometry, otoacoustic emission, tympanometry, auditory brainstem response.</p>	

Practicum

1. Attend camps, seminars, workshops, conferences, school screening, community-based screening.
2. Undertake the activities such as ‘Dangerous decibel’ program (www.dangerousdecibels.org)
3. Visit a speech pathologist/audiologist in different practice settings and provide a report.
4. Administer ICF protocols for patients with different disorders.
5. Explore websites of various institutions, hearing aid companies, NGOs working with disabled and describe the accessibility features and information provided.
6. Develop one pamphlet/poster/ in local language that would address some aspect of speech and hearing practice.
7. Perform accessibility ability of your institute/center and prepare a report.

References

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4. Census of India information on disability
5. Dobie, R. A (2001). Medical legal evaluation of hearing loss, 2nd Ed. Hearing health and strategies for prevention of hearing impairment WHO (2001).
6. International classification of Functioning, Disability and Health. Geneva: WHO
7. [http://www.asha.org/Practice-Portal/Professional-Issues/Audiology-Assistants/Teleaudiology- Clinical Assistants/](http://www.asha.org/Practice-Portal/Professional-Issues/Audiology-Assistants/Teleaudiology-Clinical Assistants/)
8. <http://www.asha.org/uploadedFiles/ModRegTelepractice.pdf>
9. IS:10399-1982 Methods for measurement of noise emitted by Stationary vehicles
10. IS:6229-1980 Method for measurement of real-ear
11. IS:9167-1979 Specification for ear protectors.
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13. IS:9989-1981 Assessment of noise with respect to community response.
14. John Ribera. Tele-Audiology in the United States. In Clinical Technologies: Concepts, Methodologies, Tools and Applications (pp. 693-702), 2011. Hershey, PA: Medical Information Science Reference. doi:10.4018/978-1-60960-561-2.ch305

DSCP-6.1 – Clinical (Speech-Language Pathology): 136BLP015

Type of Course	Theory /Practical	Credits	Instruction hour/week	Total No. of Lectures / Hours per Semester	Duration of Exam	Formative Assessment Marks	Summative Assessment Marks	Total Marks
DSCP-6.1	Practical	03	09	140	2 hrs.	50	50	100

Course Outcomes (COs): At the end of the course students will be able to:

CO1: know (concepts), know how (ability to apply), show (demonstrate in a clinical diary/logbook based on clinical reports/recordings, etc.), and do (perform on patients/ client contacts) the following.

Know:

1. Procedures to assess motor speech disorders in adults.
2. Differential diagnosis of motor speech disorders in adults.
3. Procedures to assess individuals with adult language disorders, and other related abnormalities.

Know-how:

1. To administer at least two standard tests for adult language disorders.
2. To administer at least two standard tests/protocols for motor speech disorders in adults.
3. To record a sample for analysis of language and speech skills in adults with neuro communication disorders.
4. To assess posture, breathing, speech and swallowing in adults with motor speech disorders.
5. To consult with inter-disciplinary medical/rehabilitation team and counsel the individual/family regarding management options and prognosis.
6. To administer at least two more (in addition to earlier semester) standard tests for childhood language disorders.
7. Counselling for children with speech-language disorders.

Show:

1. Language assessment - minimum of 2 individuals after stroke.
2. Associated problems in individuals after stroke and its evaluation.
3. Dysphagia assessment – minimum of 2 children & adults.
4. Goals and activities for therapy (including AAC) based on assessment/test results for adults with neuro-communication disorders.
5. Pre –therapy assessment and lesson plan for children with speech and language - minimum of 2 children each.

Do:

1. Bed side evaluation of individuals with neuro-communication disorders – Minimum of 2 individuals.
2. Apply speech language stimulation/therapy techniques on 5 children with language disorders/speech sound disorders/motor speech disorders–minimum 5 sessions of therapy for each child.
3. Case history - minimum of 2 children with speech and language disorders.

DSCP-6.2 – Clinical (Audiology): 136BLP016

Type of Course	Theory /Practical	Credits	Instruction hour/week	Total No. of Lectures / Hours per Semester	Duration of Exam	Formative Assessment Marks	Summative Assessment Marks	Total Marks
DSCP-6.2	Practical	03	09	140	2 hrs.	50	50	100

General considerations:

- Exposure is primarily aimed to be linked to the theory courses covered in the semester, however, not just limited to these areas.
- After completion of clinical postings in auditory diagnostics and auditory rehabilitation, the student will Know (concept), know how (ability to apply), show (demonstrate in a clinical diary/logbook), and do (perform on patients/ client contacts) the following:

Know:

1. National and international standards related to noise exposure.
2. Recommend appropriate treatment options such as speech reading, AVT, combined approaches etc.

Know-how:

1. To carryout noise survey in Industry and community.
2. To carry out mapping of cochlear implant in infants and children using both objective and subjective procedures.
3. To trouble shoot cochlear implant.

Show:

1. Analysis of objective responses like compound action potential, stapedial reflexes on at least 3 samples.
2. Comprehensive hearing conservation program for at least 1 situation.

Do:

1. AVT on at least 1 child with hearing impairment
2. Trouble shooting and fine tuning of hearing aids on at least 5 geriatric clients.
3. At least one activity for different stages involved in auditory training.

BASLP Semester –VII (Internship): Clinical speech language pathology

Type of Course	Theory /Practical	Credits	Instruction hour/week	Total No. of Lectures / Hours per Semester	Formative Assessment Marks	Summative Assessment Marks	Total Marks
DSCP-7.1	Practical	11	18	90	100	100	200

Course Outcomes (COs): At the end of the course students will be able to:

Perform screening to identify various speech and language disorders.

Perform a complete diagnostic assessment of various speech and language disorders.

Perform treatment for various speech and language disorders.

Sl. No.	Content
1	Diagnosis and management of speech, language, and swallowing disorders across the life span.
2	Report evaluation findings, counsel, make appropriate referrals and liaise with professionals from related fields.
3	Plan and execute intervention and rehabilitation programs for persons with speech language, communication, and swallowing disorders.
4	Develop and maintain clinical documentation related to persons with speech-language, communication, and swallowing disorders
5	Engage in community-related services such as camps, awareness programs specifically, and community-based rehabilitation activities, in general.
6	Gain experience in different set-ups and be able to establish speech centers indifferent set-ups
7	Advise on the welfare measures available for their clinical clientele and their families.
8	Advise and fit appropriate aids and devices for the clinical population.
9	Administer quality of life questionnaires on persons with communication disorders.
10	Make appropriate referrals and liaise with professionals from related fields.
11	Gain experience in different clinical set ups and be able to establish speech-language centers.
12	Advice on the welfare measures available for their clinical clientele and their families.

Assessment
Distribution of marks

Sl. No.	Domain	Marks
1	Case presentation and report submission	50
2	Interaction and performance	50
3	Clinical practical examination	50
4	Development of material	50
Total		200

Note:

Evaluation of internship to be done by 2 examiners.

One must be the mentor from the institute and other must be external examiner in the BOE list

Assessment must be formative with 2 examiners as above

Assessment should be completed before the closure of the given semester

BASLP Semester –VII (Internship): Clinical Audiology

Type of Course	Theory /Practical	Credits	Instruction hour/week	Total No. of Lectures / Hours per Semester	Formative Assessment Marks	Summative Assessment Marks	Total Marks
DSCP-7.2	Practical	11	18	90	100	100	200

Course Outcomes (COs): At the end of the course students will be able to:

Perform screening to identify various hearing and balance related problems.

Perform complete diagnostic assessment of various hearing and balance related problems

Perform treatment for various disorders related to hearing and balance

Sl. No.	Content
1	Carry out screening for hearing and balance problems across life span
2	Assess and diagnoses hearing disorders across life span.
3	Prepare audiological report, counsel and make appropriate referrals.
4	Plan and execute intervention and rehabilitation programs for persons with hearing disorders
5	Document records related to persons with hearing disorders
6	Engage in community related services such as camps, awareness programs specifically, and community-based rehabilitation activities, in general.
7	Make appropriate referrals and liaise with professionals from related fields.
8	Be able to establish Audiology clinics in different set-ups
9	Advise on the welfare measures available for their clinical clientele and their families.
10	Advise and fit appropriate aids and devices for their clinical population.

Assessment

Sl. No.	Domain	Marks
1	Case presentation and report submission	50
2	Interaction and performance	50
3	Clinical practical examination	50
4	Development of material	50
Total		200

Note:

Evaluation of internship to be done by 2 examiners.

One must be the mentor from the institute and other must be external examiner in the BOE list

Assessment must be formative with 2 examiners as above

Assessment should be completed before the closure of the given semester

BASLP Semester –VIII (Internship): Clinical speech language pathology

Type of Course	Theory /Practical	Credits	Instruction hour/week	Total No. of Lectures / Hours per Semester	Formative Assessment Marks	Summative Assessment Marks	Total Marks
DSCP-8.1	Practical	11	18	90	100	100	200

Course Outcomes (COs): At the end of the course students will be able to:

Perform screening to identify various speech and language disorders.

Perform a complete diagnostic assessment of various speech and language disorders.

Perform treatment for various speech and language disorders

Sl. No.	Content
1	Diagnosis and management of speech, language, and swallowing disorders across the life span.
2	Report evaluation findings, counsel, make appropriate referrals and liaise with professionals from related fields.
3	Plan and execute intervention and rehabilitation programs for persons with speech language, communication, and swallowing disorders.
4	Develop and maintain clinical documentation related to persons with speech-language, communication, and swallowing disorders
5	Engage in community-related services such as camps, awareness programs specifically, and community-based rehabilitation activities, in general.
6	Gain experience in different set-ups and be able to establish speech centers indifferent set-ups
7	Advise on the welfare measures available for their clinical clientele and their families.
8	Advise and fit appropriate aids and devices for the clinical population.
9	Administer quality of life questionnaires on persons with communication disorders.
10	Make appropriate referrals and liaise with professionals from related fields.
11	Gain experience in different clinical set ups and be able to establish speech-language centers.
12	Advice on the welfare measures available for their clinical clientele and their families.

Assessment

Sl. No.	Domain	Marks
1	Case presentation and report submission	50
2	Interaction and performance	50
3	Clinical practical examination	50
4	Development of material	50
Total		200

Note:

Evaluation of internship to be done by 2 examiners.

One must be the mentor from the institute and other must be external examiner in the BOE list

Assessment must be formative with 2 examiners as above

Assessment should be completed before the closure of the given semester

BASLP Semester –VIII (Internship): Clinical – Audiology

Type of Course	Theory /Practical	Credits	Instruction hour/week	Total No. of Lectures / Hours per Semester	Formative Assessment Marks	Summative Assessment Marks	Total Marks
DSCP-8.2	Practical	11	18	90	100	100	200

Course Outcomes (COs): At the end of the course students will be able to:

Perform screening to identify various hearing and balance related problems.

Perform a complete diagnostic assessment of various hearing and balance related problems.

Perform treatment for various disorders related to hearing and balance

Sl. No.	Content
1	Carry out screening for hearing and balance problems across life span
2	Assess and diagnoses hearing disorders across life span.
3	Prepare audiological report, counsel and make appropriate referrals.
4	Plan and execute intervention and rehabilitation programs for persons with hearing disorders
5	Document records related to persons with hearing disorders
6	Engage in community related services such as camps, awareness programs specifically, and community-based rehabilitation activities, in general.
7	Make appropriate referrals and liaise with professionals from related fields.
8	Be able to establish Audiology clinics in different set-ups
9	Advise on the welfare measures available for their clinical clientele and their families.
10	Advise and fit appropriate aids and devices for their clinical population.

Assessment

SI No	Domain	Marks
1	Case presentation and report submission	50
2	Interaction and performance	50
3	Clinical practical examination	50
4	Development of material	50
Total		200

Note:

Evaluation of internship to be done by 2 examiners.

One must be the mentor from the institute and other must be external examiner in the BOE list

Assessment must be formative with 2 examiners as above

Assessment should be completed before the closure of the given semester