PROGRAM

And

COURSE OUTCOME

DEPARTMENT OF AUDIOLOGY AND SPEECH LANGUAGE PATHOLOGY

Attested CTC

Vice-Chancellor
Sumandeep Vidyapeeth
An Institution Deemed to be University
Vill. Piparia, Taluka: Wagholi,
Dist. Vadodara-391 760. (Gujarat)
PROGRAM NAME:
BACHELOR IN AUDIOLOGY AND SPEECH LANGUAGE PATHOLOGY (B. ASLP)

PROGRAM OUTCOME B. ASLP PROGRAM

At the end of four years B. ASLP program the graduate shall be able to:

- Acquire knowledge understand concepts of Normal aspects and disorders of Speech, Language and Hearing. The graduates get trained under this Program in evaluation, diagnosis, treatment and management of communication disorders.
- Train the graduate to practise as independent professionals as Audiologist and Speech Language Pathologists in different work settings like Hospitals, Special Schools, and Rehabilitation Centre.
- Analyze Preventive measures for the Speech Language, Swallowing and Hearing Disorder and implement those preventive measures for public awareness and education program.
- Undertake Research Projects in the areas of Speech and Hearing which will enhance the scope for further Job Opportunities in Industry.
- Learn the Professional Ethics through code of conduct and liaise with professionals in allied fields and other stake holders.

COURSE OUTCOME

SEMESTER I
Communication Sciences (Theory).
- After completing of this course, the student shall be able to understand the basic Anatomy and Physiology of Speech and Hearing (Theory).
- After completing of this course, the student shall be able to understand the anatomy of the auditory system, anatomy of the speech mechanism, physiology of hearing mechanism, functioning of speech and swallowing mechanism.

Clinical Psychology (Theory).
- After completing of this course, the student shall be able to understand the Concepts of clinical psychology and its significance for speech and hearing concept of normality, abnormality, classification of abnormal behaviour, cognitive, motor, emotional and social development theories of learning, therapy techniques based on learning principles, neuropsychological assessment, rehabilitation application of neuropsychology in the field of speech and hearing and basics of counselling.

Linguistics and Phonetics (Theory).
- After completing of this course, the student shall be able to understand different branches and aspects of linguistics characteristics, functions of language, and different branches of phonetics, tapping, linguistics, phonology, morphology,
syntax, semantics, and pragmatics, acquisition of language, and bi/multilingualism and related issues.

Electronics and Acoustics (Theory).
- After completing of this course, the student shall be able to understand the concept and types of power supply for biomedical instruments, basic aspects of digital signal processing, and theoretical basis of acoustics required for audiologists functioning of computers and computing systems.

Research Methodology and Statistics (Theory).
- After completing of this course, the student shall be able to understand the basic concept of Research in the field of audiology and speech-language pathology, design and execution of research ethical guidelines for conducting research.

SEMESTER - II

Neurology (Theory).
- After completing of this course, the student shall be able to understand Basic concepts about Anatomy and Physiology of Nervous System related to Speech and Hearing, neural organization –different structures, Functions of various systems, Neurosensory & Neuromotor controls in speech, language and hearing mechanisms, cerebral plasticity and dominance and its relevance for speech, language and hearing disorders.

Otolaryngology (Theory).
- After completing of this course, the student shall be able to understand with knowledge of causes, signs, symptoms, pathophysiology and management of diseases of external, middle and inner ear leading to hearing loss, and causes, signs, symptoms, pathophysiology and management of diseases of laryngeal and articulatory systems.

Speech Language Pathology (Theory).
- After completing of this course, the student shall be able to understand the different speech and language disorders, basic concepts about tools required for diagnosing speech and language disorders, basics of assessment procedures for speech and language disorders, basic principles and intervention procedures for speech and language disorders, clinical requirements to practice, different laws, social-cultural and ethical issues.

Audiology (Theory).
- After completing of this course, the student shall be able to understand and carry out experiments to measure differential sensitivity loudness and Pitch, case history, tuning fork tests and interpret the results, pure tone audiometry including masking on clinical population and appreciate the theoretical back ground, speech audiometry, carry out subjective calibration and daily listening checks of the
audiometer and get adequate theoretical information necessary to understand concepts involved in objective calibration.

Practicals (Speech Language Pathology)
- Demonstrate normal aspects of speech and analyse perceptually variations in voice, articulation and fluency in different recorded speech samples of typical individuals at different age groups (children, adults and older adults) & gender, normal aspects of language and analyse perceptually variations in language in different recorded samples of typical individuals at different age groups (children, adults and older adults) and gender, stress, rhythm and intonation and variations in rate of speech and analyse perceptually variations in prosody in different recorded samples of typical individuals at different age groups (children, adults and older adults) and gender, Use IPA to transcribe spoken words.

Practicals (Audiology).
- Students shall having practical knowledge regarding Calculation of the relative intensities with different reference intensities, decibels when sound intensities are doubled, increased by 4 times, add decibels when two sounds with different intensities are produced simultaneously, collect pictures of audiometers that existed between 1920 and 1990.

SEMESTER III

Voice and Its Disorder (Theory)
- After completing of this course, the student shall be able to understand to describe characteristics of normal voice, identify voice disorders and explain etiology related to voice problems and its pathophysiology, assess voice disorders and provide counselling

Speech Sound Disorders (Theory)
- After completing of this course, the student shall be able to understand description normal speech sound development, characterization of individuals with speech sound disorders, perform phonological analysis and assessment of speech sound disorders, plan intervention for individuals with speech sound disorders.

Diagnostic Audiology: Behavioural Tests (Theory).
- After completing of this course, the student shall be able to understand how to choose individualized test battery for assessing cochlear pathology, retro cochlear pathology, functional hearing loss, CAPD, vestibular dysfunctions, tinnitus and hyperacusis, independently run the tests and interpret the results to identify the above conditions.

Amplification Devices. (Theory)
- After completing of this course, the student shall be able to assess the candidacy for hearing aids and counsel accordingly, evaluate the listening needs and select the appropriate hearing aid, independently program digital hearing aids as per the...
listening needs of the client, and independently assess the benefit from the hearing aid using subjective and objective methods.

**Clinicals in Audiology. (Clinical)**
- After completing of this course, the student shall be able to understand as follows;
  - to evaluate speech and language components using informal assessment methods, administer at least two standard tests for childhood language disorders, administer at least two standard tests of articulation/speech sounds and assess speech intelligibility.

**Speech Language Pathology. (Clinical)**
- After completing of this course, the student shall be able to understand as follows;
  - to obtain detailed case history from clients or parents/guardians, carryout commonly used tuning fork tests, administer pure tone audiometry including appropriate masking techniques on adults using at least techniques, and administer tests to find out speech reception threshold, speech identification scores, most comfortable and uncomfortable levels in adults.

**SEMESTER - IV**

**Motor Speech Disorder in Children (Theory).**
- After completing of this course, the student shall be able to understand characteristics of motor speech disorders in children such as cerebral palsy, childhood apraxia of speech; dysarthria's assess the speech and non-speech aspects associated with the above

**Language Disorders in Children. (Theory)**
- After completing of this course, the student shall be able to understand the process of acquisition of language, factors that influence its Development in children, identification and assess language delay and deviance in children, select appropriate strategies for intervention, counsel and provide guidance to parents/caregivers of children with language disorders.

**Diagnostic Audiology: Physiological Tests (Theory).**
- After completing of this course, the student shall be able to understand on need for using the different physiological tests in the audiological assessment independently run the tests and interpret the results to detect the middle ear, cochlear and retro cochlear pathologies, differentially diagnose design tailor-made test protocols in Immittance, AEPs and OAEs as per the clinical need, make appropriate diagnosis based on the test results and suggest referrals.

**Implantable Hearing Devices (Theory).**
- After completing of this course, the student shall be able to understand assess candidacy for bone anchored hearing devices, middle ear implants, cochlear Implants, and ABI, select the appropriate device depending on the audiological and non-audiological findings handle post-implantation audiological management
assess the benefit derived from implantation, counsel the parents/care givers during different stages of implantation.

**Clinicals in Speech Language Pathology. (Clinical)**
- After completing of this course, the student shall be able to understand as follows:
  - To administer at least two standard tests for childhood language disorders, administer at least two standard tests of articulation / speech sounds, set goals for therapy (including AAC) based on assessment /test results for children with language and speech sound disorders, record a voice sample for acoustic and perceptual analysis, assess parameters of voice and breathing for speech, assessment protocol for children with motor speech disorders including reflex profile and swallow skills, and counselling for children with speech-language disorders.

**Clinicals in Audiology. (Clinical)**
- After completing of this course, the student shall be able to understand as follows:
  - To administer at least 1 test for adaptation, recruitment and functional hearing loss, counsel hearing aid user regarding the use and maintenance hearing aids, troubleshoot common problems with the hearing aids, select test battery for detection of central auditory processing disorders, select different types of ear moulds depending on type of hearing aid, client, degree, type and configuration of hearing loss

**SEMESTER - V**

**Structural Anomalies and Speech Disorders (Theory).**
- After completing of this course, the student shall be able to understand the characteristics of disorders with structural anomalies including speech evaluate and diagnose the speech characteristics seen in these disorders learn about the techniques for the management of speech disorders in these conditions.

**Fluency and its Disorders. (Theory)**
- After completing of this course, the student shall be able to understand the characteristics of fluency and its disorders evaluate and diagnose fluency disorders learn about the techniques for the management of fluency disorders.

**Paediatric Audiology (Theory).**
- After completing of this course, the student shall be able to understand auditory development, list of etiologies and relate them to different types of auditory disorders that may arise explain different hearing screening/identification procedures and their application elaborate on different aspects of paediatric behavioural and physiological / electrophysiological evaluation.
After completing of this course, the student shall be able to understand the different communication options available for young children with hearing impairment explain the impact of hearing impairment on auditory development and spoken language communication describe factors that effect of acoustic accessibility and strategies to manage them at home and in classroom.

Clinicals in Speech Language Pathology.
- After completing of this course, the student shall be able to understand as follows;
  To administer at least two more (in addition to earlier semesters) standard tests for childhood language disorders, record a speech sample for analysis of fluency skills (including blocks & its frequency, rate of speech, prosody, etc.), assess posture and breathing for speech in children with motor speech disorders, consult with inter-disciplinary medical / rehabilitation team and counsel the individual / family regarding management options and prognosis.

Clinicals in Audiology
- After completing of this course, the student shall be able to understand as follows;
  to administer auditory brainstem responses for the purpose of threshold estimation and sight of lesion testing, administer high frequency tympanometry and calculate resonance frequency, administer high risk register, and modify the given environment to suit the needs of hearing impairment.

SEMESTER VI

Motor Speech Disorders in Adults (Theory).
- After completing of this course, the student shall be able to understand the characteristics of acquired motor speech disorders in adults evaluate and diagnose speech characteristics in acquired motor speech disorders learn about the techniques for the management of speech and related errors in acquired motor speech disorders.

Language Disorders in Adults (Theory).
- After completing the course, the student shall able to understand the characteristics of language disorders in adults evaluate and diagnose speech characteristics in adults with language disorders learn about the techniques for the management of speech and related errors in language disorders seen in adults.

Aural Rehabilitation in Adults. (Theory)
- After completing of this course, the student shall be able to understand the impact on the quality of life of adults with hearing impairment, explain the principles benefits and limitations of auditory training, speech reading, recognize factors that impair communication and suggest facilitative and repair strategies, identify components of aural rehabilitation program for adults (planning to outcome
(assessment) identify strategies used with the older adult to implement a successful aural rehabilitation program.

Audiology in Practice. (Theory)
- After completing of this course, the student shall be able to understand about legislation relating to hearing impairment and other disabilities, incorporate ethical practices in professional service delivery, provide information on welfare measures, policies of government when needed, different strategies to create awareness of hearing impairment and programs to address them.

Clinicals in Speech Language Pathology.
- After completing of this course, the student shall be able to understand as follows;
  To administer at least two standard tests for adult language disorders, administer at least two standard tests / protocols for motor speech disorders in Adults, record a sample for analysis of language and speech skills in adults with Neuro Communication Disorders, assess posture, breathing, speech and swallowing in adults with motor speech disorders, consult with inter-disciplinary medical / rehabilitation team and counsel the individual / family regarding management options and prognosis.

Clinicals in Audiology
- After completing of this course, the student shall be able to understand as follows;
  To carry out noise survey in Industry and community, carryout mapping of cochlear implant in infants and children using both objective and subjective procedures, trouble shoot cochlear implant, National and international standards related to noise exposure, recommend appropriate treatment options such as speech reading, AVT, combined approaches etc.

SEMESTER - VII

Clinicals in Speech Language Pathology (Internship).
- After completing of this course, the student shall be able to understand carrying out the following; Diagnosis and management of speech, language, and swallowing disorders across life span, Report evaluation findings, counsel and make appropriate referrals, Plan and execute intervention and rehabilitation programs for persons with speech Language, communication, and swallowing disorders, develop and maintain records related to persons with speech-language, communication, and swallowing disorders, engage in community related services such as camps, awareness programs and community based rehabilitation activities, in general, make appropriate referrals and liaise with professionals from related fields, gain experience in different set ups and be able to establish speech centres in different set-ups, advise on the welfare measures available for their clinical clientele and their families, advise and fit appropriate aids and devices for their clinical population.
Semester VIII

Clinicals in Audiology (Internship).

After completion of this course the intern shall be able to carrying out the following; Diagnosis and management of hearing disorders across life span, report evaluation findings, counsel and make appropriate referrals, Plan and execute intervention and rehabilitation programs for persons with hearing disorders, develop and maintain records related to persons with hearing disorders, engage in community related services such as camps, awareness programs and community based rehabilitation activities, make appropriate referrals and liaise with professionals from related fields, gain experience in different set ups, advise on the welfare measures available for their clinical clientele and their families, and advise and fit appropriate aids and devices for their clinical population.