BACHELOR IN AUDIOLOGY AND SPEECH LANGUAGE PATHOLOGY

B.ASLP curriculum is oriented towards training students to undertake the responsibilities of an Audiologist and Speech-Language Pathologist.

- i. This course enables the students to acquire professional knowledge in prevention, identification, assessment, habilitation and rehabilitation of speech, language, hearing, balancing and swallowing aspects. The course enables the students to implement public awareness and education programmes.
- ii. Adequate emphasis is to be placed on cultivating logical and scientific habits of thoughts, clarity of expression, independence of judgment and ability to collect and analyse information and to correlate them.
- iii. The course enables the student to liaise with other Professionals and stakeholders. It also enables the student to undertake advocacy measures on behalf of and for persons with Speech Language and Hearing Disorders.
- iv. The educational process should be placed in historical background as an evolving process and not merely as an acquisition of a large number of disjointed facts without a proper perspective. The history of the field with reference to its evolution both in this country and rest of the world should form a part of this process
- v. Lectures alone are generally not adequate as a method of training and are a poor means of transferring / acquiring information and even less effective at skill development and in generating the appropriate attitudes. Every effort should be made to encourage the use of active methods related to demonstrations and first-hand experience. Students will be encouraged to learn in small groups through peer interactions, so as to gain maximal experience through contacts with patients and the communities in which they live. While the curriculum objectives often refer to areas of knowledge or science, they are best taught in a setting of clinical relevance and hands on experience for students who assimilate and make this knowledge a part of their own working skills.
- vi. Clinics should be organized in small groups so that a teacher can give personal attention to each student with a view to improve his/her skill and competence in handling the patient.
- vii. Proper records of the work should be maintained which will form the basis of the student's internal assessment for practicals and should be available for the inspectors at the time of inspection of the college.

COURSE OBJECTIVES

SEMESTER I

1.1.1: Communication Sciences: Speech and Language

Objective: After completion of the course students shall have:

- 1. Understanding of the relationship between Communication, Speech and Language Knowledge of physical, biological, social, psychological and linguistic bases of speech
- 2. Understanding of normal speech and language development

3. Understanding of causes related to speech and language disorders Knowledge of characteristics of speech and language disorders

1.1.2. Communication Sciences: Audiology:

Objective: After studying the paper the students are expected to realize the following:

- 1. Explain the origin of audiology
- 2. Take case history and explain the importance of case history in clinical diagnosis
- 3. Explain the physical properties of sound and its psychophysical correlates
- 4. Explain the pathological conditions that would cause hearing loss
- 5. Explain the usefulness of tuning fork tests in identification of different type of hearing loss.

1.1.3: Anatomy, Physiology & Pathology of Communication Sciences & Disorders

Objective After completion of the course students shall have the understanding of:

- 1. Anatomy of speech, language and hearing mechanism
- 2. Physiological system different systems in speech, language and hearing
- 3. General pathological conditions causing speech, language and hearing disorders

1.1.4 Clinical Psychology

Objective: After completing this course, the student will be able to understand the

- 1. Scope of clinical psychology and its significance for speech and hearing
- 2. Concept of normality, abnormality and classification of abnormal behaviour
- 3. Cognitive, motor, emotional and social development
- 4. Theories of learning and therapy techniques based on learning principles
- 5. Neuropsychological assessment and rehabilitation
- 6. Application of neuropsychology in the field of speech and hearing
- 7. Basics of counselling

1.1.5: Electronics and Acoustics

Objective: After Completing this course, the student will be able to understand the

- 1. Concept and types of power supply for biomedical instruments
- 2. Basic aspects of digital signal processing
- 3. Theoretical basis of acoustics required for audiologists
- 4. Functioning of computers and computing systems

SEMESTER II

1.2.1: Speech-Language Pathology - Assessment & Management

Objectives: After completing this course, the student will be able to understand the

- 1. Different speech and language disorders
- 2. Basic concepts and tools required for diagnosing speech and language disorders
- 3. Basics of assessment procedures for speech and language disorders
- 4. Basic principles and intervention procedures for speech and language disorders
- 5. Clinical requirements to practice
- 6. Basic principles of providing counselling and guidance to clients and caregivers

1.2.2: Audiological Evaluation

Objective: After completing this course, the student will be able to

- 1. Understand and carryout experiments to measure differential sensitivity, loudness and pitch
- 2. Take case history, administer the tuning fork tests and interpret the results
- 3. Administer pure tone audiometry including masking on clinical population and appreciate the theoretical background of it
- 4. Carryout different tests involved in speech audiometry and appreciate the theoretical background
- 5. Carryout subjective calibration and daily listening checks of the audiometer
- 6. Get adequate theoretical information necessary to understand concepts involved in objective calibration

1.2.3: Linguistics and Phonetics

Objective: After completing this course, the student will be able to understand:

- 1. Different branches and aspects of linguistics
- 2. Characteristics and functions of language
- 3. Different branches of Phonetics, applied linguistics and Phonology, morphology, syntax, semantics, pragmatics
- 4. Acquisition of language and factors affecting it Bi/multilingualism and related issues

1.2.4: Otolaryngology

Objective: After completing this course, the student will be able to understand the

- 1. Causes, signs, symptoms, pathophysiology and management of diseases of external, middle and inner ear leading to hearing loss.
- 2. Causes, signs, symptoms, pathophysiology and management of diseases of laryngeal and articulatory system

1.2.5: Pediatrics and Genetics

Objectives: After studying the course a student will have:

- 1. A basic idea about the role of genetics in Speech-Language and Hearing
- 2. Knowledge about the various concepts related to growth and development in pediatrics SEMESTER III

2.3.1. Voice and its Disorders

Objective: After completing this course, the students should be able to

- 1. Describe characteristics of good, normal and abnormal voice and identify voice disorders
- 2. Explain etiology related to voice problems, and its pathophysiology.
- 3. Assess good, normal and abnormal voice.
- 4. Provide counselling and therapy to individuals with voice disorders

2.3.2 Speech Sound Disorders

Objective: After completing this course, the student will be able to

1. Describe normal speech sound development and characterization of individuals with speech sound disorders.

- 2. Perform phonological analysis and assessment of speech sound disorders.
- 3. Plan intervention for individuals with speech sound disorders

2.3.3 Diagnostic Audiology: Behavioral Tests

Objective: After completing this course, the student will be able to

- 1. Choose individualized test battery for assessing cochlear pathology, retro cochlear pathology, functional hearing loss, CAPD, vestibular dysfunctions, tinnitus and hyperacusis
- 2. Independently run the tests and interpret the results to identify the above conditions and also use the information for differential diagnosis
- 3. Make adjustments in the test parameters to improve sensitivity and specificity of tests.
- 4. Make appropriate diagnosis based on the test results and suggest referrals.

2.3.4 Educational Audiology

Objective: After studying the paper the students are expected to realize the following:

- 1. Effects of hearing loss on development and learning
- 2. To analyse the client scenarios and decide what kind of intervention to be provided to the child with hearing loss in the school
- 3. Become aware of criteria for selection of appropriate educational placement of the child
- 4. To apply principles of effective management in classroom/school settings
- 5. Roles of educational agencies and legal agencies for children with disability in India

2.3.5 Neurology

Objective: After completing this course, the student will be able to

- 1. Understand Basic concepts, anatomy and physiology of nervous system related to speech and hearing
- 2. Nural organization –different structures and functions of various systems neurosensory and neuromotor controls in speech, language and hearing mechanisms
- 3. Cerebral plasticity and dominance and its relevance for speech, language and hearing disorders Various neural diseases, lesions, nutritional and metabolic conditions affecting speech, language and hearing
- 4. Basic principles and assessment procedures used in speech, language and hearing disorders associated with neurological conditions
- 5. Basic principles and management procedures used in speech, language and hearing disorders associated with neurological conditions

2.3.6. Clinical Practicum: Speech Language Pathology

General considerations: Exposure is primarily aimed to be linked to the theory courses covered in the semester After completion of clinical postings in Speech –language diagnostics, the student will know (concepts), know how (ability to apply), show (demonstrate in a clinical diary/log book based on clinical reports/recordings, etc), and do (perform on patients/client contacts) the following:

2.3.7. Clinical Practicum: Audiology

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/log book), and do (perform on patients/ client contacts) the following:

SEMESTER IV

2.4.1 Fluency and Its Disorders

Objective: After completion of the course, the student will be able to

- 1. Understand the characteristics of fluency and its disorders.
- 2. Evaluate and diagnose fluency disorders.
- 3. Learn about the techniques for the management of fluency disorders

2.4.2Child Language Disorders

Objective: After completing this course, the student will be able to

- 1. Explain the process of acquisition of language and factors that influence its development in children.
- 2. Identify and assess language delay and deviance in children.
- 3. Select appropriate strategies for intervention.
- 4. Counsel and provide guidance to parents/caregivers of children with language disorders.

2.4.3 Diagnostic Audiology: Physiological Tests

Objective: After completing this course, the students will be able to

- 1. Justify the 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 and also differentially diagnose
- 2. Design tailor-made test protocols in immittance, AEP's and OAE's as per the clinical need
- 3. Make appropriate diagnosis based on the test results and suggest referrals.

2.4.4. Rehabilitative Audiology

Objective: After completion of this course, candidate should be able to:

- 1. List various types of auditory training approaches available for individuals with hearing impairment.
- 2. Explain various types of speech reading tests and speech reading training procedures available.
- 3. Select appropriate management option/s for Tinnitus and Hyperacusis.
- 4. Select appropriate management technique/s for children with special needs.
- 5. Select appropriate management strategies for older adults with hearing impairment

2.4.5 Statistics and Research Methods

Objective: After completing this course, the student will be able to understand the

- 1. Basic concept of research in the field of audiology and speech-language pathology
- 2. Design and execution of research Ethical guidelines for conducting research

2.4.6 Clinical Practicum - Speech-Language Pathology

General considerations: Exposure is primarily aimed to be linked to the theory courses covered in the semester. After completion of clinical postings in Speech –language diagnostics, the student will know (concepts), know how (ability to apply), show (demonstrate in a clinical diary/log book based on clinical reports/recordings, etc), and do (perform on patients/client contacts) the following:

2.4.7 Clinical Practicum- Audiology

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/log book), and do (perform on patients/client contacts) the following:

SEMESTER V

3.5.1. Motor Speech Disorders in Children

Objective: After completing this course, the student will be able to

- 1. Describe the characteristics of motor speech disorders in children such as cerebral palsy, childhood apraxia of speech and other childhood dysarthrias
- 2. Assess the speech and non-speech aspects associated with the above conditions
- 3. Plan and execute therapy strategies for children with motor speech disorders

3.5.2. Maxillofacial Anomalies and Laryngectomy

Objective After completing the course, the student will be able to

- 1. Understand the characteristics of disorders with structural anomalies including speech
- 2. Evaluate and diagnose the speech characteristics seen in these disorders.
- 3. Learn about the techniques for the management of speech disorders in these conditions

3.5.3 Amplification Devices

Objective After completion of this course the students should be able to

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

3.5.4 Pediatric Audiology

Objective: After completing this course, the student will be able to

- 1. Describe auditory development
- 2. List etiologies and relate them to different types of auditory disorders that may arise
- 3. Explain different hearing screening/identification procedures and their application
- 4. Elaborate on different aspects of pediatric behavioral and Physiological/electrophysiological evaluation

3.5.5. Speech-Language Pathology and Audiology in Practice

After completing the course, the student will able to,

- 1. List and describe the highlights of legislations relating to speech and hearing disabilities Incorporate ethical practices in professional activities.
- 2. Provide information on the facilities available for the speech and hearing disabled including welfare measures and policies of government.
- 3. Describe different strategies to create awareness of speech and hearing impairment and facilities available to take care of them.
- 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.
- 5. Familiarizing terminology, technology and methods used in public education, clinical practice including tele-practice and camps And their application in speech and hearing service delivery.

3.5.6 Clinicals in Speech Language Pathology

General considerations:

- 1. Exposure is primarily aimed to be linked to the theory courses covered in the semester.
- 2. After completion of clinical postings in Speech –language diagnostics, the student will know (concepts), know how (ability to apply), show (demonstrate in a clinical diary/log book based on clinical reports/recordings, etc.), and do (perform on patients/ client contacts) the followin

3.5.7 Clinicals in Audiology

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/log book), and do (perform on patients/ client contacts) the following:

SEMESTER VI

3.6.1 Motor Speech Disorders in Adults and Dysphagia

Objective: After completing the course, the student will be able to .

- 1. Understand the characteristics of acquired motor speech disorders in adults .
- 2. Evaluate and diagnose speech characteristics in acquired motor speech disorders.
- 3. Learn about the techniques for the management of speech and related errors in acquired motor speech disorder

3.6.2. Language Disorders in Adults

Objective After completing the course, the student will be able to

1. Understand the characteristics of language disorders in adults

- 2. Evaluate and diagnose speech characteristics in adults with language disorders
- 3. Learn about the techniques for the management of speech and related errors in language disorders seen in adults

3.6.3 Environmental Audiology

Objective: After studying the paper the students are expected to realize the following:

- 1. Explain the effects of noise on various systems in the body, with special reference to auditory system
- 2. Select appropriate test/s and assess the effects of occupational noise.
- 3. Independently assess various kinds of noise in the environment and its possible effects. Identify people at-risk of developing occupational hearing loss and plan effective hearing conservation program.
- 4. Assess eligibility for compensation in individuals with NIHL.

3.6.4 Implantable Hearing Devices and Hearing Aid Fitting

Objective : After studying the paper the students are expected to realize the following:

- 1. Select hearing aids based on pre-selection factors and appropriate tests
- 2. Select different assistive listening devices.
- 3. Take ear impression and prepare the ear mould.
- 4. Decide candidacy and select appropriate implantable device
- 5. Trouble shoot hearing aids and counsel.

3.6.6 Clinical Practicum-Speech-Language Pathology

General considerations

- 1. Exposure is primarily aimed to be linked to the theory courses covered in the semester.
- 2. After completion of clinical postings in Speech-language diagnostics, the student will know (concepts), know how (ability to apply), show (demonstrate in a clinical diary/log book based on clinical reports/recordings, etc.), and do (perform on patients/ client contacts) the following

3.6.7 Clinical Practicum - Audiology

General considerations:

- 1. Exposure is primarily aimed to be linked to the theory courses covered in the semester, however, not just limited to these areas.
- 2. 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/log book), and do (perform on patients/ client contacts) the following:

4.1 Clinical -Speech Language Pathology

General considerations:

1. Clinical internship aims to provide clinical exposure and experience in different set ups. The students would not only carry out greater quantum of work, but also work varied clinical populations and in different contexts.

- 2. Internship will provide greater opportunity for the students to liaise with professionals from allied fields. The intern is expected to demonstrate competence and independence in carrying out the following, among others
- 1. Diagnosis and management of speech, language, and swallowing disorders across life span.
- 2. Report evaluation findings, counsel and make appropriate referrals.
- 3. Plan and execute intervention and rehabilitation programs for persons with speech language, communication, and swallowing disorders
- 4. Develop and maintain records 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. Make appropriate referrals and liaise with professionals from related fields.
- 7. Gain experience in different set u ps and be able to establish speech centers in different set-ups
- 8. Demonstrate that the objectives of the B.ASLP program have been achieved.
- 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.

4.2 Clinical Practicum- Audiology

General considerations: Clinical internship aims to provide clinical exposure and experience in different set ups. The students would not only carry out greater quantum of work, but also work varied clinical populations and in different contexts. Internship will provide greater opportunity for the students to liaise with professionals from allied fields. The intern is expected to Demonstrate competence and independence in carrying out the following, among others:

- General:
- 1. Diagnosis and management of hearing disorders across life span
- . 2. Report evaluation findings, counsel and make appropriate referrals.
- 3. Plan and execute intervention and rehabilitation programs for persons with hearing 132 4. Disorders
- 5. Develop and maintain 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. Gain experience in different set ups and be able to establish hearing centres in different set-ups
- 9. Demonstrate that the objectives of the B.ASLP program have been achieved.
- 10. Advise on the welfare measures available for their clinical clientele and their families.
- 11. Advise and fit appropriate aids and devices for their clinical population.