# Bachelor in Audiology and Speech –Language Pathology (B.ASLP)

## **Course Outcome**

## **Objectives of the B.ASLP program**

The objectives of the B.ASLP program are

1. to equip the students with knowledge and skills to function as audiologists and speech-language pathologists in different work

settings

2. understand concepts in speech, language, communication, hearing and disability

3. screen, evaluate, diagnose and assess the severity of different disorders related to speech, language, swallowing and hearing,

- 4. manage speech, language, swallowing and hearing disorders across life span
- 5. counsel persons with disorders of communication and their family members
- 6. rehabilitate persons with speech, language, swallowing and hearing disorders
- 7. prevent speech, language, swallowing and hearing disorders
- 8. liaise with professionals in allied fields and other stake holders
- 9. implement public awareness and education program,

10. undertake advocacy measures on behalf of and for persons with speech language and hearing disorders

#### Semester I

#### **BSPLPC 118: Communication Sciences**

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

- a) basic concepts in speech, hearing, language and communication
- b) basic concepts of hearing sensitivity and acoustics

#### **BSPLPC 119: Anatomy and Physiology of Speech and Hearing**

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

- a) anatomy of the auditory system
- b) anatomy of the speech mechanism
- c) physiology of hearing mechanism
- d) functioning of speech and swallowing mechanism

#### **BSPLPC 120: Clinical Psychology**

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

- a) scope of clinical psychology and its significance for speech and hearing
- b) concept of normality, abnormality and classification of abnormal behavior
- c) cognitive, motor, emotional and social development
- d) theories of learning and therapy techniques based on learning principles
- e) neuropsychological assessment and rehabilitation
- f) application of neuropsychology in the field of speech and hearing
- g) basics of counselling

#### **BSPLPC 121: Linguistics and Phonetics**

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

- a) different branches and aspects of linguistics
- b) characteristics and functions of language
- c) different branches of phonetics, applied linguistics, and phonology
- d) morphology, syntax, semantics, pragmatics
- e) acquisition of language and factors affecting it
- f) bi/multilingualism and related issues

## **BSPLPC 122: Electronics and Acoustics**

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

- a) concept and types of power supply for biomedical instruments
- b) basic aspects of digital signal processing
- c) theoretical basis of acoustics required for audiologists
- d) functioning of computers and computing systems

#### **BSPLPC 123: Research Methods and Statistics**

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

- a) basic concept of research in the field of audiology and speech-language pathology
- b) design and execution of research

ethical guidelines for conducting research

## Semester II

#### **BSPLPC 169: Neurology**

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

- a) basic concepts, anatomy and physiology of nervous system related to speech and hearing
- b) neural organization –different structures and functions of various systems
- c) neurosensory and neuromotor controls in speech, language and hearing mechanisms
- d) cerebral plasticity and dominance and its relevance for speech, language and hearing disorders
- e) various neural diseases, lesions, nutritional and metabolic conditions affecting speech, language and hearing
- f) basic principles and assessment procedures used in speech, language and hearing disorders associated with neurological conditions
- g) basic principles and management procedures used in speech, language and hearing disorders associated with neurological conditions

## **BSPLPC 170: Otolaryngology**

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

- a) causes, signs, symptoms, pathophysiology and management of diseases of external, middle and inner ear leading to hearing loss, and
- b) causes, signs, symptoms, pathophysiology and management of diseases of laryngeal and articulatory systems

## **BSPLPC 171: Speech-Language Pathology**

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

- a) different speech and language disorders
- b) basic concepts and tools required for diagnosing speech and language disorders
- c) basics of assessment procedures for speech and language disorders
- d) basic principles and intervention procedures for speech and language disorders
- e) clinical requirements to practice,
- f) different laws, social-cultural and ethical issues
- g) identification and prevention of speech and language disorders
- h) basic principles of providing counselling and guidance to clients and caregivers

## **BSPLPC 172: Audiology**

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

- a) understand and carryout experiments to measure differential sensitivity loudness and pitch
- b) take case history, administer the tuning fork tests and interpret the results
- c) administer pure tone audiometry including masking on clinical population and appreciate the theoretical back ground of it
- d) carryout different tests involved in speech audiometry appreciate the theoretical back ground
- e) carryout subjective calibration and daily listening checks of the audiometer

f) get adequate theoretical information necessary to understand concepts involved in objective calibration

#### Semester III

#### **BSPLPC 219: Voice and its Disorders**

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

- a) describe characteristics of normal voice and identify voice disorders
- b) explain etiology related to voice problems, and its pathophysiology
- c) assess voice disorders
- d) provide counselling and therapy to individuals with voice disorders

#### **BSPLPC 220: Speech Sound Disorders**

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

- a) describe normal speech sound development and characterization of individuals with speech sound disorders.
- b) perform phonological analysis and assessment of speech sound disorders.
- c) plan intervention for individuals with speech sound disorders.

#### **BSPLPC 221: Diagnostic Audiology: Behavioral Tests**

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

- a) choose individualized test battery for assessing cochlear pathology, retro cochlear pathology, functional hearing loss, CAPD, vestibular dysfunctions, tinnitus and hyperacusis
- b) independently run the tests and interpret the results to identify the above conditions and also use the information for differential diagnosis
- c) make adjustments in the test parameters to improve sensitivity and specificity of tests.
- d) make appropriate diagnosis based on the test results and suggest referrals.

#### **BSPLPC 222:** Amplification Devices

Objectives: After completing this course, students will be able to

- a) assess the candidacy for hearing aids and counsel accordingly
- b) evaluate the listening needs and select the appropriate hearing aid
- c) independently program digital hearing aids as per the listening needs of the client
- d) independently assess the benefit from the hearing aid using subjective and objective methods
- e) make all types of ear molds
- f) counsel the parents/care givers at all stages

## Semester IV

#### **BSPLPC 269: Motor Speech Disorders in Children**

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

- a) describe the characteristics of motor speech disorders in children such as cerebral palsy, childhood apraxia of speech and other childhood dysarthrias
- b) assess the speech and non-speech aspects associated with the above conditions
- c) plan and execute therapy strategies for children with motor speech disorders

#### **BSPLPC 270: Language Disorders in Children**

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

- a) explain the process of acquisition of language and factors that influence its development in children.
- b) identify and assess language delay and deviance in children.
- c) select appropriate strategies for intervention.
- d) counsel and provide guidance to parents/caregivers of children with language disorders.

#### **BSPLPC 271: Diagnostic Audiology: Physiological Tests**

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

- a) justify the need for using the different physiological tests in the audiological assessment
- b) independently run the tests and interpret the results to detect the middle ear, cochlear and retro cochlear pathologies and also differentially diagnose
- c) design tailor-made test protocols in immittance, AEPs and OAEs as per the clinical need
- d) make appropriate diagnosis based on the test results and suggest referrals.

#### **BSPLPC 272: Implantable Hearing Devices**

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

- a) assess candidacy for bone anchored hearing devices, middle ear implants, cochlear implants, and ABI
- b) select the appropriate device depending on the audiological and non-audiological findings
- c) handle post-implantation audiological management
- d) assess the benefit derived from implantation, and

e) counsel the parents/care givers during different stages of implantation

## Semester V

#### **BSPLPC 319: Structural Anomalies and Speech Disorders**

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

- a) understand the characteristics of disorders with structural anomalies including speech
- b) evaluate and diagnose the speech characteristics seen in these disorders
- c) learn about the techniques for the management of speech disorders in these conditions

## BSPLPC 320: Fluency and its Disorders Objectives: After completion of the course, the student will be able to

- a) understand the characteristics of fluency and its disorders
- b) evaluate and diagnose fluency disorders
- c) learn about the techniques for the management of fluency disorders

## **BSPLPC 321: Paediatric Audiology**

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

- a) describe auditory development
- b) list etiologies and relate them to different types of auditory disorders that may arise
- c) explain different hearing screening/identification procedures and their application
- d) elaborate on different aspects of paediatric behavioral and physiological / electrophysiological evaluation

#### **BSPLPC 322:** Aural Rehabilitation in Children

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

- a) describe the different communication options available for young children with hearing impairment
- b) explain the impact of hearing impairment on auditory development and spoken language communication
- c) describe factors that effect of acoustic accessibility and strategies to manage them at home and in classroom
- d) design activities for auditory learning at different levels
- e) enumerate how the needs of individuals with hearing impairment using sign language and spoken language as form of communication in India are being met

## Semester VI

**BSPLPC 369: Motor Speech Disorders in Adults** 

#### **Objectives:** After completing the course, the student will be able to

- a) understand the characteristics of acquired motor speech disorders in adults
- b) evaluate and diagnose speech characteristics in acquired motor speech disorders
- c) learn about the techniques for the management of speech and related errors in acquired motor speech disorders

#### **BSPLPC 370: Language Disorders in Adults**

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

- a) understand the characteristics of language disorders in adults
- b) evaluate and diagnose speech characteristics in adults with language disorders
- c) learn about the techniques for the management of speech and related errors in language disorders seen in adults

## **BSPLPC 371: Aural Rehabilitation in Adults**

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

- a) describe the impact on the quality of life of adults with hearing impairment
- b) explain the principles benefits and limitations of auditory training and speech reading
- c) recognize factors that impair communication and suggest facilitative and repair strategies
- d) identify components of aural rehabilitation program for adults (planning to outcome assessment)
- e) identify strategies used with the older adult to implement a successful aural rehabilitation program
- f) administer different tools for assessment of hearing handicap, attitudes and beliefs that can impact aural rehabilitation

#### **BSPLPC 372:** Audiology in Practice

Objectives: After completing the course, the student will able to

- a) list and describe the highlights of legislations relating to hearing impairment and other disabilities
- b) incorporate ethical practices in professional service delivery.
- c) provide information on welfare measures, policies of government when needed
- d) describe different strategies to create awareness of hearing impairment and programs to address them
- e) explain the different clinical practice settings in audiology with reference to their requirement, protocols and role and responsibility of audiologist
- f) describe methods to measure the impact of noise on humans and strategies to address excessive noise exposure in industries and the community.

g) describe terminology, technology and methods used in tele practice, and their application in audiological service delivery

