

(DEEMED TO BE UNIVERSITY)
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Accredited by NAAC with 'A' Grade

### YENEPOYA MEDICAL COLLEGE

## PROGRAM OUTCOMES AND COURSE OUTCOMES UNDERGRADUATE PROGRAM

### BACHELOR IN AUDIOLOGY AND SPEECH LANGUAGE PATHOLOGY



## PROGRAM OUTCOMES BACHELORS IN AUDIOLOGY AND SPEECH LANGUAGE

#### **PATHOLOGY**

S. No.	Program Outcome	Description	Knowledge, Skills, Attitude
1.	PO1	Function as audiologists and speech-language pathologists in different work settings	K, S, A
2.	PO2	Understand concepts in speech, language, communication, hearing and disability	K
3.	PO3	Screen, evaluates, diagnose and assess the severity of different disorders related to speech, language, swallowing and hearing, manage speech, language, swallowing and hearing disorders across life span counsel persons with disorders of communication and their family members rehabilitate persons with speech, language, swallowing and hearing disorders	K, S, A
4.	PO4	Prevent speech, language, swallowing and hearing disorders, liaise with professionals in allied fields and other stake holders implement public awareness and education program	K, S, A
5.	PO5	Undertake advocacy measures on behalf of and for persons with speech language and hearing disorders	S, A
6.	PO6	Counsel and guide persons with disorders of hearing and balance as well as their family members and also persons with disorders of speech, language and swallowing and their family members	S, A
7.	PO7	Implement rehabilitation programs for persons with hearing and balance disorders, to function as the disability certification authority in the field, liaise with professionals in allied fields and other stake holders and speech, language and swallowing disorders	K,S, A
8.	PO8	Advise government and other institutions on legal and policy issues related to persons with hearing and balance disorders, and speech, language, swallowing disorders	K, S, A



#### **COURSE OUTCOMES**

# BACHELORS IN AUDIOLOGY AND SPEECH LANGUAGE PATHOLOGY

S.L. No	Name of the Course	Course Outcome Code	Description
B 1.1	Communication Sciences	CO1	Understands the basic concepts in speech, hearing, language and communication
		CO2	Understands basic concepts of hearing sensitivity and acoustics
В 1.2	Anatomy and Physiology of Speech and Hearing	CO1	Comprehends the anatomy of the auditory system & Anatomy of the speech mechanism
_		CO2	Understands physiology of hearing mechanism
		CO3	Understands functioning of speech and swallowing mechanism
B 1.3	Clinical Psychology	CO1	Able to understand the scope of clinical psychology and its significance for speech and hearing
		CO2	Knows the concept of normality, abnormality and classification of abnormal behavior
		CO3	Understands cognitive, motor, emotional and social development
		CO4	Comprehends theories of learning and therapy techniques based on learning principles neuropsychological assessment and rehabilitation
		CO5	Able to apply concepts of neuropsychology in the field of speech and hearing basics of counseling
B 1.4	Linguistics and Phonetics	CO1	Understand different branches and aspects of linguistics, characteristics and functions of language
		CO2	Knows different branches of phonetics, applied linguistics, and phonology morphology, syntax, semantics, pragmatics
		CO3	Understands acquisition of language and factors affecting it bi/multilingualism and related issues
B 1.5	Electronics and Acoustics	CO1	Able to understand the concept and types of power supply for biomedical instruments
			A C

	CO2	Understands basic aspects of digital signal processing
	CO3	Knows theoretical basis of acoustics required for audiologists functioning of computers and computing systems
Research Methods and Statistics	CO1	student will be able to understand the basic concept of research in the field of audiology and speech-language pathology design and execution of research
	CO2	Understands Ethical guidelines for conducting research
Neurology	CO1	student will be able to understand basic concepts, anatomy and physiology of nervous system related to speech and hearing
	CO2	Comprehends neural organization —different structures and functions of various systems neurosensory and neuromotor controls in speech, language and hearing
	CO3	Understands mechanisms cerebral plasticity and dominance and its relevance for speech, language and hearing disorders
	CO4	Knows various neural diseases, lesions, nutritional and metabolic conditions affecting speech, language and hearing
	CO5	Aware of basic principles and assessment procedures used in speech, language and hearing disorders associated with neurological conditions
	CO6	Knows basic principles and management procedures used in speech, language and hearing disorders associated with neurological conditions
Otolaryngology	CO1	Students will be able to understand the causes, signs, symptoms, pathophysiology and management of diseases of external, middle and inner ear leading to hearing loss
	CO2	Knows the causes, signs, symptoms, pathophysiology and management of diseases of laryngeal and articulatory systems
Speech-Language Pathology	CO1	Able to understand the different speech and language disorders
	CO2	Knows basic concepts and tools required for diagnosing speech and language disorders
	CO3	Understands basics of assessment procedures for speech and language disorders
	and Statistics  Neurology  Otolaryngology  Speech-Language	Research Methods and Statistics CO1 CO2 Neurology CO1 CO2 CO3 CO3 CO4 CO4 CO5 CO6 CO6 CO6 CO6 CO2

		CO4	Aware of basic principles of providing counseling and guidance to clients and caregivers
		CO5	Comprehend basic principles and intervention procedures for speech and language disorders clinical requirements to practice,
		CO6	Aware of different laws, social-cultural and ethical issues
		CO7	Knowledge of identification and prevention of speech and language disorders
B 2.4	Audiology	CO1	Understand and carryout experiments to measure differential sensitivity loudness and pitch
		CO2	Able to take case history, administer the tuning fork tests and interpret the results administer pure tone audiometry including masking on clinical
		CO3	Knows population and appreciate the theoretical back ground of it
		CO4	Able to carryout different tests involved in speech audiometry appreciate the theoretical back ground
		CO5	Able to carry out subjective calibration and daily listening checks of the audiometer
		CO6	Ability to get adequate theoretical information necessary to understand concepts involved in objective calibration
B 2.5	Practicals (Speech- language Pathology)	3	Skills Development
В 2.6	Practicals (Audiology)		Skills Development
В 3.1	Voice and its Disorders	CO1	Able to describe characteristics of normal voice and identify voice disorders explain etiology related to voice problems, and its
		CO2	Knows pathophysiology & assess voice disorders
		CO3	Ability to provide counseling and therapy to individuals with voice disorders
В 3.2	Speech Sound Disorders	CO1	Able to describe normal speech sound development and characterization of individuals with speech sound disorders.
		CO2	Able perform phonological analysis and assessment of speech sound disorders. plan intervention for

B 4.2	Child Language	COI	Able to explain the process of acquisition of language
		CO2	Able to assess the speech and non-speech aspects associated with the above conditions plan and execute therapy strategies for children with motor speech disorders
B 4.1	Motor Speech Disorders in Children	COI	Able to describe the characteristics of motor speech disorders in children such as cerebral palsy, childhood apraxia of speech and other childhood dysarthrias
В 3.6	Clinicals in Audiology		Development of Skills on  Know  Know- how  Show  Do
В 3.5	Clinicals in Speech- Language Pathology	CO5	Able to counsel the parents/care givers at all stages  Development of Skills on  Know  Know-how  Show  Do
		CO4	Able to make all types of ear molds
		CO3	Able to independently assess the benefit from the hearing aid using subjective and objective methods
		CO2	Able to independently program digital hearing aids as per the listening needs of the client
В 3.4	Amplification Devices	CO1	Able to assess the candidacy for hearing aids and counsel accordingly evaluate the listening needs and select the appropriate hearing aid
		CO4	Able to make appropriate diagnosis based on the test results and suggest referrals.
		CO3	Able to make adjustments in the test parameters to improve sensitivity and specificity of tests.
		CO2	Ability to independently run the tests and interpret the results to identify the above conditions and also use the information for differential diagnosis
В 3.3	Diagnostic Audiology - Behavioral Tests	CO1	Able to choose individualized test battery for assessing cochlear pathology, retro cochlear pathology, functional hearing loss, CAPD, vestibular dysfunctions, tinnitus and hyperacusis
			individuals with speech sound disorders.

	Disorders		and factors that influence its development in children.
		CO2	Able to identify and assess language delay and deviance in children & select appropriate strategies for intervention.
		CO3	Able to counsel and provide guidance to parents/caregivers of children with language disorders.
В 4.3	Diagnostic Audiology - Physiological Tests	CO1	Able to justify the need for using the different physiological tests in the audiological assessment
		CO2	Able to independently run the tests and interpret the results to detect the middle ear, cochlear and retro cochlear pathologies and also differentially diagnose
		CO3	Able to design tailor-made test protocols in immittance, AEPs and OAEs as per the clinical need
		CO4	Knows to make appropriate diagnosis based on the test results and suggest referrals.
		CO5	
B 4.4	Implantable Hearing Devices	CO1	Able to assess candidacy for bone anchored hearing devices, middle ear implants, cochlear implants, and ABI
		CO2	Able to select the appropriate device depending on the audiological and non-audiological findings
		CO3	Able to handle post-implantation audiological management assess the benefit derived from implantation, and
		CO4	Knows to counsel the parents/care givers during different stages of implantation
B 4.5	Clinicals in Speech Language Pathology		Development of Skills on <ul> <li>Know</li> <li>Know- how</li> <li>Show</li> <li>Do</li> </ul>
B4.6	Clinicals in Audiology		Development of Skills on <ul> <li>Know</li> <li>Know- how</li> <li>Show</li> <li>Do</li> </ul>
B 5.1	Structural Anomalies and Speech Disorders	COI	Understands the characteristics of disorders with structural anomalies including speech evaluate and

			diagnose the speech characteristics seen in these disorders
		CO2	Able to learn about the techniques for the management of speech disorders in these conditions
B 5.2	Fluency and its Disorders	CO1	Understands the characteristics of fluency and its disorders evaluate and diagnose fluency disorders
		CO2	Learn about the techniques for the management of fluency disorders
B 5.3	Pediatric Audiology	CO1	Able to describe auditory development
		CO2	Ability to explain different hearing screening/identification procedures and their application elaborate on different aspects of pediatric behavioral and physiological / electrophysiological evaluation
		CO3	Able to list etiologies and relate them to different types of auditory disorders that may arise
В 5.4	Aural Rehabilitation in Children	CO1	Knows to describe the different communication options available for young children with hearing impairment
		CO2	Able to explain the impact of hearing impairment on auditory development and spoken language communication
		CO3	Able to describe factors that affect of acoustic accessibility and strategies to manage them at home and in classroom
		CO4	Knows to design activities for auditory learning at different levels
	·	CO5	Knows to enumerate how the needs of individuals with hearing impairment using sign language and spoken language as form of communication in India are being met
B 5.5	Clinicals in Speech- Language Pathology		Development of Skills on  Know  Know- how  Show  Do
В 5.6	Clinicals in Audiology		Development of Skills on  Know Know-how

			• Show
			• Do
B 6.1	Motor Speech Disorders in Adults	COI	Able to understand the characteristics of acquired motor speech disorders in adults evaluate and diagnose speech characteristics in acquired motor speech
		CO2	Knows disorders learn about the techniques for the management of speech and related errors in acquired motor speech disorders
B 6.2	Language Disorders in Adults	CO1	Able to evaluate and diagnose speech characteristics in adults with language disorders
		CO2	Able to learn about the techniques for the management of speech and related errors in language disorders seen in adults
B 6.3	Aural Rehabilitation in Adults	CO1	Able to describe the impact on the quality of life of adults with hearing impairment
		CO2	Able to explain the principles benefits and limitations of auditory training and speech reading recognize factors that impair communication and suggest facilitative and repair strategies
		CO3	Knows to identify components of aural rehabilitation program for adults (planning to outcome assessment)
		CO4	Able to identify strategies used with the older adult to implement a successful aural rehabilitation program
		CO5	Able to administer different tools for assessment of hearing handicap, attitudes and beliefs that can impact aural rehabilitation
B 6.4	Audiology in Practice	CO1	Able to list and describe the highlights of legislations relating to hearing impairment and other disabilities
		CO2	Able to incorporate ethical practices in professional service delivery
		CO3	Able to provide information on welfare measures, policies of government when needed describe different strategies to create awareness of hearing impairment and programs to address them
		CO4	Able to explain the different clinical practice settings in audiology with reference to their requirement, protocols and role and responsibility of audiologist
		CO5	Able to describe methods to measure the impact of noise on humans and strategies to address excessive

			noise exposure in industries and the community.
			Development of Skills on
	Clinicals in Seconds		<ul><li>Know</li></ul>
B 6.5	Clinicals in Speech- Language Pathology		<ul> <li>Know- how</li> </ul>
	Language I autology		<ul><li>Show</li></ul>
			<ul><li>Do</li></ul>
			Development of Skills on
	Clinicals in		<ul><li>Know</li></ul>
B 6.6	Audiology		<ul><li>Know- how</li></ul>
	riddiology		• Show
			• Do
B 7.1	Clinicals in Speech-	CO1	Diagnosis and management of speech, language, and
	Language Pathology		swallowing disorders across life span.
		CO2	Report evaluation findings, counsel and make
			appropriate referrals.
		GO2	Plan and execute intervention and rehabilitation
		CO3	programs for persons with speech language, communication, and swallowing disorders
			Develop and maintain records related to persons with
		CO3	speech-language, communication, and swallowing
		CO3	disorders
			Engage in community related services such as camps,
		CO4	awareness programs specifically, and community
			based rehabilitation activities, in general.
			Make appropriate referrals and liaise with
		CO5	professionals from related fields. Gain experience in
			different set ups and be able to establish speech centres
			in different set-ups
			Demonstrate that the objectives of the B.ASLP
		CO6	program have been achieved. Advise on the welfare
			measures available for their clinical clientele and their
			families.
		CO7	Advise and fit appropriate aids and devices for their clinical population.
		007	cimical population.
	Clinicals in		Diagnosis and management of hearing disorders across
B 7.2	Audiology	COI	life span. Report evaluation findings, counsel and
	, tudiology		make appropriate referrals.
		CO2	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
CO3	services such as camps, awareness programs
	specifically, and community based rehabilitation
	activities, in general.
	Make appropriate referrals and liaise with
CO4	professionals from related fields. Gain experience in
	different set ups and be able to establish hearing
	centres in different set-ups
	Demonstrate that the objectives of the B.ASLP
CO5	program have been achieved. Advise on the welfare
CO3	measures available for their clinical clientele and their
	families.
CO4	Advise and fit appropriate aids and devices for their
CO6	clinical population.

ATTESTED

Dr. Gangadhara Somayaji K.S. Registrar Yenepoya (Deemed to be 'Iniversity) University Road, Doralakartle Mangalore - 575 818, Karnataka