

## B.Sc. in Audiology & Speech Pathology/ Speech Pathology Study Plan

### ■ University Compulsory Courses 16 C.H

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### ■ University Elective Courses 9 C.H

Pages ( 64 & 65 )

### ■ Faculty Compulsory Courses 27 C.H

Line No.	Code	Course	
102181	MED218A	GROSS ANATOMY & HISTOLOGY	3
102182	MED218B	GROSS ANATOMY & HISTOLOGY (LAB)	0
102304	MED230A	HUMAN PHYSIOLOGY	3
102305	MED230B	HUMAN PHYSIOLOGY (LAB)	1
103021	MED302A	MEDICAL ETHICS	1
183111	PH311A	BIOSTATISTICS	2
911031	CHEM103A	GENERAL CHEMISTRY	3
911072	CHEM107B	GENERAL CHEMISTRY LAB	1
921031	PHY103A	GENERAL PHYSICS	3
931030	BIO103	GENERAL BIOLOGY	3
931070	BIO107	GENERAL BIOLOGY (PRACTICAL)	1
1114580	P.T458	MANAGEMENTS IN ALLIED MEDICAL SCIENCES	3
1731160	CS116	SELECTED PROGRAMMING LANGUAGES	3

### ■ Department Compulsory Courses 33 C.H

Line No.	Code	Course	
1141040	AS104	INTRODUCTION TO SPEECH & AUDIOLOGY	3
1141060	AS106	CHILD DEVELOPMENT & PSYCHOLOGY	3
1142110	AS211	GENERAL LINGUISTICS	3
1142130	AS213	LEARNING THEORIES & DISABILITIES	3
1142200	AS220	LANGUAGE DEVELOPMENT FOR NORMAL & HEARING-IMPAIRED CHILDREN	3
1142280	AS228	PHONETICS: THEORY & APPLICATION	3
1142420	AS242	PHYSIOLOGY & ANATOMY OF HEARING AND SPEECH	2
1143170	AS317	ACOUSTICS	3
1143210	AS321	DISEASES OF ENT	3
1143550	AS355	CLINICAL PSYCHOLOGY & PRINCIPLES OF BEHAVIOR MODIFICATION	3
1144030	AS403	SPECIAL EDUCATION & TEACHING OF DEAF	3
1144930	AS493	RESEARCH PROJECT	1

### ■ Specialization Compulsory Courses 47 C.H

Line No.	Code	Course	
102121	MED212A	PATHOLOGY	3
102222	MED222B	BIOCHEMISTRY	3
102234	MED223D	BIOCHEMISTRY (LAB)	1
102261	MED226A	NEUROSCIENCE (1)	3

102262	MED226B	NEUROSCIENCE 1 (LAB)	0
102422	MED242B	MICROBIOLOGY	3
102430	MED243	MICROBIOLOGY (LAB)	1
1143600	AS360	ARTICULATION & PHONOLOGICAL DISORDERS	3
1143630	AS363	CLINICAL PRACTICUM /SPEECH (1)	2
1143640	AS364	CLINICAL PRACTICUM /SPEECH (2)	2
1143641	AS364	CLINICAL PRACTICUM /SPEECH (2) (LAB)	0
1143660	AS366	LANGUAGE DISORDERS	3
1143661	AS366	LANGUAGE DISORDERS (LAB)	0
1143680	AS368	STUTTERING	3
1143681	AS368	STUTTERING (LAB)	0
1143820	AS382	CEREBRAL PALSY & DYSPHAGIA	3
1143821	AS382	CEREBRAL PALSY & DYSPHAGIA (LAB)	0
1144100	AS410	CLEFT LIP & PALATE	2
1144450	AS445	CLINICAL PRACTICUM /SPEECH (3)	3
1144480	AS448	CLINICAL PRACTICUM /SPEECH (4)	3
1144810	AS481	HUMAN VOICE & VOICE DISORDERS	3
1144860	AS486	NEUROMOTOR SPEECH DISORDERS	3
1144870	AS487	AUDITORY - VERBAL THERAPY	3

**TOTAL**

**132 C.H**

**\* For prerequisite & equivalent courses see the Courses' Description.**

## B.Sc. in Speech Pathology

### Courses' Description

#### AS 104 Introduction to Speech & Hearing 3 C.H

- This is an introductory course that introduces the science of linguistics to the students and the theories of speech production.
- Gives an overview of speech perception and development theories and the basic treatment principles applied to communication disorders.  
(Prerequisite: None)

#### AS 106 Child Development & Psychology 3 C.H

- Provides a review of the development of young children across the parameters of sensation, cognition, motor, social, and communication.
- From the dimension of child psychology, the student will be given the knowledge on how do children change as they develop, and what are the determinants of these developmental changes.
- Topics to be covered are: the biological bases of development, infancy and growth, early experiences, learning, emotional and social development, the development of sex role, morality, and self-control.  
(Prerequisite: none)

#### AS 211 General Linguistics 3 C.H

- Provides an introduction to the scientific study of the language and an overview of linguistic terminology and subsystems. (Prerequisite: AS 104)

#### AS 213 Learning Theories & Disabilities 3 C.H

- Aims at providing student with concepts related to human behavior.
- It also aims at highlighting the theories of learning and their applications, to improve the behaviors of humans.
- Includes basic information of learning disabilities field, historical perspectives and current directions, assessment, clinical teaching, educational services, theoretical perspectives and expanding directions (medical, psychological, educational), teaching strategies (oral language, reading, writing, mathematics), & social and emotional behavior .  
(Prerequisite: None)

#### AS 220 Language Development for Normal & Hearing-impaired Children (2 Theo, 1Prac) 3CH

- Stages of first language acquisition
- The effect of hearing on the normal and abnormal acquisition of language.
- Theories of first language acquisition.  
(Prerequisite: AS 211)

#### AS 228 Phonetics Theory & Application (2 Theo, 1Prac) 3C.H

- Articulatory phonetics; application of the International Phonetic Alphabet, including extensions for non-normal speech.
- An overview of normal aspects of articulation. Laboratory exercises are included depending on availability.  
(Prerequisite: AS 211)

#### AS 242 Physiology & Anatomy of Hearing and Speech 2 C.H

- The physiology of the ear.
- The physiology of hearing and balance system.
- The Principles of medical Consultations.  
(Prerequisite: MED 218, MED 230a)

#### AS 301 Diseases of Ear, Nose & Throat (ENT) 2 C.H

- The etiology, symptomatology, assessment and treatment of the disorders of ear, nose, throat, vestibular system and balance.
- The role of the Speech- Language therapist pre & post medical intervention.  
(Prerequisite: MED 212 & AS 242)

#### AS 315 Acoustics (3CH; 2 Theo, 1Prac)

- Acoustic properties of sounds, speech, and the dynamics of speech sound production.
- The basic principles of acoustics related to speech, sound generation, transmission, and measurement;.  
(Prerequisite: PHY 103, AS 228)

#### AS 353 Clinical Psychology & Principles of Behavior Modification 3 C.H

- It provides students with a theoretical overview of clinical interventions emphasizing a cognitive/behavioral orientation.
- It then aims at developing skills in clinical interventions including techniques and strategies related to various orientations with an integrative approach
- Finally, the course aims at providing students with applications of behavioral and social learning principles in psychiatric rehabilitations.  
(Prerequisite AS 213)

#### AS 360 Articulation and Phonological Disorders (3CH; 2 Theo, 1Prac)

- Introduction to articulation and Phonological disorders.
- Stages of sound system acquisition.
- Causes and treatment of articulation and phonological disorders.
- Writing clinical reports.  
(Prerequisite: AS 228)

#### AS 363 Clinical Practicum/ Speech I (2 C.H;2 Prac)

- Observation of clinical activities in conjunction with discussion of clinical issues.
- The clinical process and nature of the client-clinician relationship are stressed.
- Basic concepts of clinical practice, including models of diagnosis, fundamentals of clinical data collection and measurement, treatment planning, professional writing. (Prerequisite: AS 360 or Corequisite)

#### AS 364 Clinical Practicum/ Speech /2 (2 C.H; Prac)

- Supervised clinical practice; further observations of clinical activities and investigation of the clinical process with an emphasis on diagnostics, assessment tools, and methodologies in speech pathology.
- Advanced concepts of clinical practice, including principles of human behavior change, clinical decision making, generalization, transfer and maintenance, models of service delivery, ethical practice, advanced professional writing .  
(Prerequisite: AS 363)

#### AS 368 Stuttering (3CH; 2 Theo, 1Prac)

- The theoretical foundations of dysfluent behavior have to be reviewed. Topics taught are: symptomatology, Incidence variables, characteristics of the person who stutter, the stuttering response, theories of stuttering, and normal dysfluencies. Differential diagnosis, principles of therapeutic techniques, and management procedures for children and adults will be studied. Various treatment approaches are to be examined and compared.

- Supervised clinical experiences within or outside the JUST Speech-Language-Hearing Clinic. Initial experience for students to assess and treat individuals who stutter and to write clinical reports. (*Prerequisite: AS 360*)

**AS 382 Cerebral Palsy (CP) & Dysphagia 3CH  
(2 Theo, 1Prac)**

- Etiology and nature of CP and Dysphasia.
- The assessment and treatment of language and voice disorders related to CP and dysphagia. (*Prerequisite : AS 104*)

**AS 386 Language Disorders (3CH; 2 Theo, 1Prac)**

- Introduction to language disorders
- Language delay, language delay evaluation and treatment
- Writing clinical reports. (*Prerequisite: AS 315*)

**AS 403 Special Education & Teaching of deaf 3C.H**

- Nature of special education.
- Family participation.
- Related physical, psychological & social services. (*Prerequisite: AS 301*)

**AS 411 Cleft lip & Palate (2 CH; 1 Theo, 1 Prac)**

- Etiology & nature of cleft lip & palate.
- Resonance disorder of velopharynx (VPI).
- Speech assessment & habitation.
- Pos – surgical intervention. (*Prerequisite: AS 360*)

**AS 445 Clinical Practicum/ Speech /3 (3 C.H; Prac)**

- Supervised clinical practice; Students taking this course will have the opportunity to be placed in a facility outside the University.
- Differential diagnosis of speech disorders. Methods involved in complete diagnostic speech pathology and liaison with medical personnel.
- Advanced Clinical speech pathology; Theory, procedures for assessment of speech disorders in adult and pediatric populations; experience in test administration through supervised laboratory & clinical sessions in educational or clinical settings.
- Students will have flexibility in scheduling and be supervised on-site by the coordinator of the program. (*Prerequisite: AS 364*)

**AS 448 Clinical Practicum/ Speech /4 (3 C.H; Prac)**

- Dealing and treating advanced and specialized cases.
- Dealing with different voice, speech and language disorders and rehabilitating them independently.
- Reporting a case of each of these disorders and writing reports for final evaluation. (*Prerequisite: AS 445*)

**AS 481 Human Voice and Voice Disorders 3 C.H  
(2 theo, 1 Prac)**

- This course focuses on the acoustic, physiologic, and psychological factors contributing to normal and abnormal phonation and resonance of speech. Includes consideration of cleft palate and other cranio-facial anomalies. Assessment and intervention strategies for organic and functional voice disorders will be explored.
- Supervised clinical experiences within or outside the JUST Speech-Language-Hearing Clinic. Initial experience for students to assess and treat individuals with organic and functional voice disorders and to write clinical reports. (*Prerequisite: AS 301*)

**AS 486 Neuromotor Speech Disorders 3 C.H  
(2 theo, 1 Prac)**

- Focus on both congenital and acquired motor speech disorders (e.g., dysarthria and apraxia of speech) and neurolinguistic disorders related to traumatic brain injury, cerebro-vascular accidents and neurological disease. The neuroanatomy and neurophysiology underlying these disorders will be explored.
- Normal and disordered aspects of cognitive/information processing will be studied.
- The nature, assessment and management of aphasia will be addressed from multiple theoretical and practical perspectives.
- Motor control will be addressed across the domains of acoustics, aerodynamics, and kinematics. The assessment, diagnosis, and treatment of motor speech disorders will be approached from both theoretical and clinical perspectives.
- Supervised clinical experiences within or outside the JUST Speech-Language-Hearing Clinic.
- Initial experience for students to assess and treat individuals with congenital and acquired motor speech disorders and aphasia and related disorders, and to write clinical reports. (*Prerequisite: MED 226*)

**AS 487 Auditory-Verbal Therapy 3C.H  
(2 Theo, 1Prac)**

- This course will focus on the habilitation-rehabilitation of individuals with hearing-impairments with emphasis on auditory- verbal therapy- procedures and techniques.
- Supervised clinical experiences within or outside the JUST Speech-Language-Hearing Clinic. Initial experience for students to practice speech therapy for the hearing- impaired, and to write clinical reports.
- Students have to be oriented to prosthetic management/ amplification of profoundly hearing-impaired adults and children. (*Prerequisite: AS 242*)

**AS 493 Research Project 1 C.H**

- A written genuine theoretical or experimental study or a special project that address a variety of topics in speech-language pathology developed under the direction of a faculty member is required by each student.
- Student should use scientific approaches to research questions, designs, statistical procedures, methodologies, and scientific writing. Students might be advised to use computer software for statistical analysis. (*Prerequisite; PH 311 or Corequisite*)