

B.Sc. in Audiology & 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 (FOR NON COMPUTER SCIENCE INFORMATION STUDENTS)	3

Department Compulsory Courses 92 C.H

Line No.	Code	Course	
102121	MED212A	PATHOLOGY	3
102222	MED222B	BIOCHEMISTRY	3
102234	MED223D	BIOCHEMISTRY (LAB)	1
102422	MED242B	MICROBIOLOGY	3
102430	MED243	MICROBIOLOGY (LAB)	1
1141040	AS104	INTRODUCTION TO SPEECH & AUDIOLOGY	3
1141060	AS106	CHILD DEVELOPMENT & PSYCHOLOGY	3
1142030	AS203	GENERAL LINGUISTICS	2
1142070	AS207	LEARNING THEORIES & DISABILITIES	1
1142220	AS222	LANGUAGE DEVELOPMENT FOR NORMAL & HEARING-IMPAIRED CHILDREN	3
1142240	AS224	PHONETICS: THEORY & APPLICATION	3
1142260	AS226	ACOUSTICS	2
1142520	AS252	HEARING PHYSIOLOGY & IMPAIRMENT	2
1143000	AS300	DISEASES OF ENT	2
1143090	AS309	CLINICAL PSYCHOLOGY & PRINCIPLES OF BEHAVIOR MODIFICATION	2
1143370	AS337	AUDIOLOGICAL EVALUATION (1)	3
1143371	AS337	AUDIOLOGICAL EVALUATION(1) LAB	0
1143390	AS339	AUDIOLOGICAL EVALUATION (2)	3
1143391	AS339	AUDIOLOGICAL EVALUATION (2) (LAB)	0
1143480	AS348	LANGUAGE DISORDERS	3
1143481	AS348	LANGUAGE DISORDERS (LAB)	0
1143540	AS354	HEARING AIDS	3
1143541	AS354	HEARING AIDS (LAB)	0

1143570	AS357	CLINICAL PRACTICUM / AUDIOLOGY (1)	2
1143610	AS361	ARTICULATION & PHONOLOGICAL DISORDERS	3
1143620	AS362	CEREBRAL PALSY & DYSPHAGIA	2
1143621	AS362	CEREBRAL PALSY & DYSPHAGIA (LAB)	0
1143630	AS363	CLINICAL PRACTICUM /SPEECH (1)	2
1143640	AS364	CLINICAL PRACTICUM /SPEECH (2)	2
1143641	AS364	CLINICAL PRACTICUM /SPEECH (2) (LAB)	0
1143680	AS368	STUTTERING	3
1143681	AS368	STUTTERING (LAB)	0
1143720	AS372	CLINICAL PRACTICUM /AUDIOLOGY (2)	2
1143721	AS372	CLINICAL PRACTICUM /AUDIOLOGY (2) (LAB)	0
1144050	AS405	SPECIAL EDUCATION & TEACHING OF DEAF	2
1144070	AS407	AUDITORY-VERBAL THERAPY	2
1144090	AS409	CLEFT LIP & PALATE	2
1144340	AS434	INSTRUMENTATION AND CALIBRATION OF AUDIOLOGY EQUIPMENT	2
1144470	AS447	CLINICAL PRACTICUM /SPEECH (3)	2
1144510	AS451	CLINICAL PRACTICUM / AUDIOLOGY (3)	2
1144570	AS457	COCHLEAR IMPLANTS AND HEARING REHABILITATION	2
1144580	AS458	PEDIATRIC AUDIOLOGY	3
1144581	AS458	PEDIATRIC AUDIOLOGY (LAB)	0
1144610	AS461	HUMAN VOICE & VOICE DISORDERS	3
1144660	AS466	NEUROGENIC SPEECH DISORDERS	3
1144661	AS466	NEUROGENIC SPEECH DISORDERS (LAB)	0
1144680	AS468	CLINICAL PRACTICUM /SPEECH (4)	2
1144681	AS468	CLINICAL PRACTICUM /SPEECH (4) (LAB)	0
1144720	AS472	AUDITORY REHABILITATION & VESTIBULAR ASSESSMENT & INDUSTRIAL AUDIOLOGY	2
1144780	AS478	CLINICAL PRACTICUM / AUDIOLOGY (4)	2
1144781	AS478	CLINICAL PRACTICUM / AUDIOLOGY (4) (LAB)	0
1144930	AS493	RESEARCH PROJECT	1

TOTAL 144 C.H

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

B.Sc. in Audiology and 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 203 General Linguistics 2 C.H

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

AS 207 Learning Theories & Disabilities 1 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 222 Language Development for Normal & Hearing-impaired Children 3 C.H

- Stages of first language acquisition
- the effect of hearing on the normal and abnormal acquisition of language.
- Theories of first language acquisition.
(Prerequisite: AS 203)

AS 224 Phonetics Theory & Application 3 C.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 203)

AS 226 Acoustics 2 C.H

- 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 203)

AS 252 Hearing Impairment and Physiology 2 C.H

- The physiology of the ear.
- The physiology of hearing and balance system.
- The Principles of medical Consultations .

(Prerequisite: M218, M230a)

AS 300 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 252)

AS 309 Clinical Psychology Clinical Psychology & Principles of Behavior Modification 2 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 106)

AS 337 Audiological Evaluation I 3C H (2 Theo , 1Prac)

- Studying the technique and interpretation of conventional hearing investigations
- Interpretation and reporting the results of hearing assessment for medical legal aspects.
- Supervised clinical training on the use of different audiometric equipment, performance and interpretation of conventional audiological investigation of adults and children over 5 years old.
(Prerequisite: AS 104 , AS 252)

AS 339 Audiological Evaluation 2 3 C.H (2Theo,1Prac)

- Comprehensive survey of theoretical and applied auditory physiological measures including evoked neural responses, Otoacoustic emission and the role measures have in the audiological test battery.
- Cochlear implant selection procedures.
- Supervised clinical training on performance and interpretation of otoacoustic emission, brainstem evoked potential response and audiological test battery.
(Prerequisite: AS 337)

AS 348 Language Disorders 3CH (2 Theo , 1Prac)

- Introduction to language disorders
- Language delay , language delay evaluation and treatment
- Writing clinical reports.
(Prerequisite: AS 224, AS 226)

AS 354 Hearing Aids 3C.H (2 Theo , 1Prac)

- The basic knowledge of all types and models of hearing aids and components.
- Ear mould and Human ear canals including human ear canals and its dynamic aspects, impression technique, ear mould modifications and the acoustic of ear moulds and tubing.
- Daily hearing check up and hearing aid performance measurements. Troubleshooting and management of hearing aid and ear moulds.
(Prerequisite: AS 337)

AS 357 Clinical Practicum/ Audiology I 2 CH (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 337 or corequisite)

AS 361 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 224)

AS 362 Cerebral Palsy (CP) & Dysphagia 2 CH

- Etiology and nature of CP and Dysphasia.
- The assessment and treatment of language and voice disorders related to CP and dysphagia.
(Prerequisite AS 348 or corequisite , AS 300)

AS 363 Clinical Practicum/ Speech I (2 CH;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 363)

AS 364 Clinical Practicum/ Speech /2 (2 CH; 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 (3C.H ; 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 361)

AS 372 Clinical Practicum/Audiology/2(2 CH; Pract)

- Further observations of clinical activities and investigation of the clinical process with an emphasis

on diagnostics, assessment tools, and methodologies in audiology.

- Advanced concepts of clinical practice, , clinical decision making, generalization, transfer and maintenance, models of service delivery, ethical practice, advanced professional writing. (Prerequisite: AS 357)

AS 405 Special Education & Teaching of deaf 2C.H

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

AS 407 Auditory-Verbal Therapy 2 C.H (1 Theo ,1 Prac)

- 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 337)

AS 409 Cleft lip &Palate 2 C.H (1 Theo ,1 Prac)

- Etiology & nature of cleft lip & palate .
- Resonance disorder of velopharynged (VPI).
- Speech assessment & habitation.
- Pos – surgical intervention.
(Prerequisite: AS 361)

AS 434 Hearing Measurement & Instrumentation 2 C.H

- Study of basic electronics, electroacoustic equipment, technique for measuring sound properties and equipment of calibration.
(Prerequisite: AS 337)

AS 447 Clinical Practicum/ Speech /3 (2 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 451 Clinical Practicum/Audiology/3 (2 CH; Prac)

- Audiology Hearing Testing; Differential diagnosis of hearing disorders.
- Methods involved in complete diagnostic audiology and liaison with medical personnel. Students may be assigned to one of several centers.
(Prerequisite: AS 354)

AS 457 Cochlear Implants and Hearing Rehabilitation 2C.H

- The importance of cochlear implants and the patients in need for them

- The determinants of the success of cochlear implants
- How the cochlear implant works.
- The different kinds of implants.
(Prerequisite: AS 354)

AS 458 Pediatric Audiology 3C.H
(2 Theo , 1Prac)

- Application of audiologic test procedures and rehabilitation techniques which are appropriate for paediatric patients.
- Study of risk criteria and screening protocols for neonatal, infants, preschool and school children.
- Supervised practical training on the pediatric hearing assessment including neonatal screening, behavioral hearing tests, Otoacoustic emission; and brainstem evoked response audiometry.
(Prerequisite: AS 337)

AS 461 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 466 Neurogenic 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: AS 365)

AS 468 Clinical Practicum/ Speech / 4 2 C.H

- Dealing and treating advanced and specialized cases.
- Dealing with different voice, speech and language disorders and habilitating them independently.
- Reporting a case of each of these disorders and writing reports for final evaluation.
(Prerequisite: AS 447)

AS 472 Auditory Rehabilitation & Vestibular 2C.H
Assessment& Industrial Audiology (Theo)

Aimed to provide the student with the knowledge of the effect of the noise exposure on hearing and understanding the risk of damages, the international regulations for noise exposure, the methods of protection from noise exposure.

- This module will be directed towards studying the approach of audiologic management of adults with hearing difficulties including: speech reading, communication repair strategies, technology, and hearing aid adjustment.
- Tinnitus assessment techniques and treatment and to teach the student the basic of the vestibular investigations and dizziness assessment.
(Prerequisite: AS 339)

AS 478 Clinical Practicum/ Audiology /4 2 C.H
(Prac)

- Audiology Hearing Testing; Differential diagnosis of hearing disorders.
- Methods involved in complete diagnostic audiology and liaison with medical personnel. Students may be assigned to one of several centers.
(Prerequisite: AS 451)

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 co- request)