

AUDI 21183- Introduction to Audiology 1

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| Status | Optional (A) |
| No of Hours | 45 hours |
| No of Credits | 3 |
| Learning Outcomes | <ul style="list-style-type: none"> • Explain the importance of case history in determining causes of hearing loss • Anatomy of human auditory system. • Demonstrate understanding of the fundamental concepts of Audiology and hearing loss related aspects • Explain basic terminology used in Audiology |
| Methods of Teaching and Learning | Lectures, case studies, role-play |
| Module content | <p>Unit 1: Anatomy ear</p> <ul style="list-style-type: none"> • Outer ear • Middle ear • Inner ear • Central auditory nervous system • Vestibular system • Efferent auditory pathways <p>Unit 2: Case history</p> <ul style="list-style-type: none"> • Need for case history • Essential factors to be included in the case history form • Comparison of adult versus child case history <p>Unit 3: Frequency</p> <ul style="list-style-type: none"> • Octave frequency concept • Psychological correlate • Relationship between pitch and frequency • Differential sensitivity: differential threshold, JND, DL for frequency • Differential sensitivity: differential threshold, JND, DL for intensity • Intensity • Relationship between loudness and intensity • Equal loudness contours and equal pitch contours • Phones and sones • Relationship between phones and sones • Use of phones and sones graph • Computation of relative loudness of two given sounds using these graphs <p>Unit 4: Decibel (dB) concept</p> <ul style="list-style-type: none"> • Different aspects of dB • Power and pressure formulae • Zero dB reference for pressure and power • Calculation of actual SPL |

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| | <ul style="list-style-type: none"> • Reference and dB values • Calculation of overall dB when two signals are superimposed • Hearing level, Sensation level • Application of dB • Most comfortable level and application • Threshold concept • Threshold of audibility • MAP and MAF • Threshold of pain <p>Unit 5: Causes of hearing impairment</p> <ul style="list-style-type: none"> • General characteristics of conductive, mixed and sensorineural hearing loss • Hereditary deafness and Congenital deafness • Acquired hearing loss in children and adults • Causes of central auditory processing disorders • Pseudohypacusis |
| Assessment | SEQ 100% (3 hrs) |