

| Course Information | | | | | |
|---------------------------|--|-------------------|----|--------------|---|
| Course Code | | * Credit Hours | 32 | * Credits | 2 |
| * Course Name | Hearing Sciences | | | | |
| (Course Type) | | | | | |
| Target Audience | | | | | |
| (Language of Instruction) | | | | | |
| * School | | | | | |
| Prerequisite | | (post | | | |
| * Instructor | | (Course Webpage) | | | |
| * Description | | | | | |
| * Description | <p>The Fundamentals of Hearing Science course is an interdisciplinary subject that delves deeply into the mysteries of auditory perception. The course covers the physical properties of sound, the physiological structure and function of the auditory system, and the psychological mechanisms of auditory information processing. Students will learn the basic physical characteristics of sound, understand how the auditory system receives, transforms, and processes sound signals until perception is formed in the cerebral cortex.</p> | | | | |

Additionally, the course emphasizes the psychological aspects of auditory perception, exploring psychological processes such as auditory attention, memory, and recognition. It also analyzes individual differences and the impact of language and cultural backgrounds on auditory experiences. Through case studies, students will master the acoustic characteristics of speech signals, recognition strategies, and the perception of non-speech sounds, enhancing their practical application skills.

Furthermore, the course will explore cutting-edge research on speech perception and auditory processing in special populations such as older adults with hearing impairment, individuals with schizophrenia, and those with autism. These studies are significant for improving auditory processing abilities in these groups and for designing more effective screening and intervention strategies. Students will gain insight into the application of auditory science across different populations, develop interdisciplinary thinking, enhance their ability to address complex hearing issues, and cultivate empathy and social responsibility.

Course objectives and contents

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|----------------------|----|----------|
| * (Course Object) | 1. | (B1, B2) |
| | 2. | (B3, B4) |
| | 3. | (A5, C3) |

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|--|---|--|---|--|--|--|------|
| * (Class Schedule & Requirements & Course Objectives) | | | | | | | |
| | | | | | | | |
| | 1 | | 2 | | | | 1 |
| | 2 | | 2 | | | | 1, 2 |
| | 3 | | 2 | | | | 1, 2 |

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| | 4 | | 2 | | | | 1, 2 |
| | 5 | | 2 | | | | 1, 2 |
| | 6 | | 2 | | | | 1, 2 |
| | 7 | | 2 | | | | 1, 2 |
| | 8 | | 2 | | | | 1, 2 |
| | 9 | | 2 | | | | 1, 2 |
| | 10 | | 2 | | | | 2, 3 |
| | 11 | | 2 | | | | 2, 3 |
| | 12 | | 2 | | | | 2, 3 |

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| | 13 | | 2 | | | | 1, 2, 3 |
| | 14 | | 2 | | | | 1, 2, 3 |
| | 15 | | 2 | | | | 1, 2, 3 |
| | 16 | | 2 | | | | 1, 2, 3 |
| | 1 | | | | | | |
| * (Grading) | 1 | 40% | | | | | |
| | 2 | 60% | | | | | |
| * (Textbooks & Other Materials) | [1] | Hearing Science Fundamentals. Norman J. Lass, Jeremy J. Donai. Mosby. 2021. 2nd Edition. 978-1635503289 | | | | | |
| More | | | | | | | |
| Notes | | | | | | | |

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