

Study program: Special education and rehabilitation			
Type and level of studies: Master academic studies			
Title of the subject: Auditory perception and speech production of deaf and hard of hearing children			
Lecturer: Sanja T. Djokovic			
Course status: Elective course for the module Hearing Disability			
ECTS: 6			
Prerequisites: No prerequisites			
Aim: The aims of this course is to help students gain a fundamental understanding of knowledge and research in the areas of auditory perception and speech production. Likewise, the students will master the basics of neurocognitive perception and speech production, which is a scientific basis for independent studies in the area of hearing disorders.			
Outcomes: The course develops competencies, knowledge and skills necessary for reading and understanding of scientific literature, not solely from the area of Special education and rehabilitation, but also from areas of audiology, psychology and neuropsychology. Also, this course will help students gain knowledge of influences of hearing disorders and changes occurring on the molecular level of CNS, but also on changes happening on the cognitive level. Upon completion of this course, students will be able to make connections and use knowledge gained from different hearing and listening-related scientific disciplines.			
Content			
<p><i>Lectures:</i> Theory of this subject includes detail presentation of anatomical and morphological of CNS, which participate in auditory perception and speech reproduction. After this, students will learn about important elements of functional connection between biological fundaments and psychological appearance related to hearing and speech. A wide variety of research and publications will be presented throughout the course, which explain and prove the influence of hearing disorder on the biological fundaments of CNS. Likewise, neuroplasticity of the brain and the usefulness of this phenomena in the speech rehabilitation will be explained. Students will also learn about reorganization of auditory brain, as well as how that phenomenon should be used in the process of rehabilitation. Also, theory will explore influence of different amplification models on the reorganization of auditory brain.</p> <p><i>Practical work:</i> Practical part of this course includes laboratory testing of hearing range, pain threshold, hearing comfort threshold, as well as all the other tests not included in the fundamental protocol for hearing examination, Students will also, in laboratory setting, simulate situations of handicapped hearing and later analyze personal impressions of those simulations. They will also be involved in creating of short experiments with the purpose of hearing diagnostics, hearing attention, hearing memory, etc. Students will also participate in research and analysis of scientific articles, related to the hearing disorders and impairments, and use gained knowledge to create rehabilitation programs. Similarly, students will be familiarized with various modern technologies used for hearing impairment and disorder diagnostics.</p>			
Literature:			
1. Douglas B. Webster, (1999). Neuroscience of communication, Singular, San Diego ISBN 1-5659-3985-9 (Chapters: 191 to 367)			
Number of active classes per week	Lecture: 2		Practical work: 2
Teaching methods: Lectures and practicum, laboratory research and analysis, group discussions and analysis, term papers, mid-term exam, analysis of video samples, essays.			
Evaluation of knowledge (maximum score 100)			
Pre obligations	Score	Final exam	Score
activities during the lectures	10	written exam	
practical teaching	10	oral exam	50
midterm(s)	20	
seminars	10		