Study program: Special education and rehabilitation sciences

Type and level of studies: Doctoral Academic Studies

Title of the subject: Speech and language research of deaf and hard-of-hearing

Lecturer: Nadezda D. Dimic, Sanja T. Djokovic, Ljubica S. Isakovic, Tamara P. Kovacevic

Course status: Elective module course

ECTS: 20

Prerequisites: No prerequisites

Aim: The aim of this course is to train students to apply the latest scientific achievements, as well as to independently create methodological frameworks for scientific research in the field of speech and language of deaf and hard-of-hearing individuals. Also, the goal of this course is to develop a critical and creative thinking in relation to the previous theoretical and practical achievements in the field of speech research in deaf and hard-of-hearing individuals**.**

Outcomes: Students will acquire knowledge to independently solve practical and theoretical problems in the field of speech and language deaf and hard-of-hearing individuals. They will gain the ability to evaluate rehabilitation procedures in the area of speech and language learning. They will be able to independently choose methods and techniques and asses language abilities in deaf and hard-of-hearing individuals. Students will learn to create instruments to study speech and language, and will acquire skills for independent project drafting and methodological competence for organizing and conducting research in the field of speech and language of deaf and hard-of-hearing individuals. Students will be trained to use new information technologies in acquiring knowledge in the field of speech and language of deaf and hard-of-hearing individuals.

Contents:

Lectures: Theoretical portion of this course will cover the following: analysis and critical review of the latest terrific settings in the field of speech and language of deaf and hard-of-hearing; review of the methodological frameworks of different types of speech and language research and the analysis of the advantages and disadvantages of their application in the deaf and hard-of-hearing population; presentation of the latest technologies used in speech and language learning (such as voice and speech processing programs, articulograms, EEG apparatus used for studies related to the cognitive basics of a language, neurofeedback, etc.); presentation of the results of the effects of different models of amplification on the formation of individual speech-language levels in deaf and hard-of-hearing; the latest research of the sign language; issues of standardization in different countries will be the subject of serious consideration and discussion.

Exercises: Practical portion of this course will cover the following: performing a number of procedures related to experimental speech and language research, namely: the application of new tests, batteries and scales with the task of designing and proposing the personal design of these measurement instruments; training in the application and analysis of spectral findings of voice and various speech segments of the deaf and hard-of-hearing; designing and drafting a project, carrying out the proposed research, processing and analyzing the results and publication of the work or public presentation at one of the scientific conferences.

Literature:

1. Northern L. Jerry, Downs P. Marion. (2001). Hearing in children. Lippincott, Philadelphia
2. Andrews, J., Shaw, P. & Lomas, G. (2011). Deaf and Hard of Hearing Students. In J. Kaufman, & D. Hallahan (Eds.), Handbook of Special Education (pp. 233-246). New York, NY: Routledge.
3. Connor, C. M., Craig, H. K., Raudenbush, S. W., Haevner, K., & Zwolan, T. A. (2006). The age and watch young deaf children receive cochelar implants and their vocabulary and speech-production growtrh: Is there added value for early implantation? Ear and Hearing, 27, 628-644.
4. Đoković, S., Dimić, N., Maksimović, S. (2009): Quantitative-Qualitative analysis of minimal hearing loss, 3rd International Conference on Fundamental and Applied Aspects of Speech and Language, Belgrade, ISBN 978-86-81879-26 -9 pp.168-173.
5. Polovina, V., Dimić, N. (2009): Grammatical ketegories in the Serbian sign language, In the book: Research in Special Education and Rehabilitation, University of Belgrade, Faculty of Special Education and Rehabilitation, Ed .: Dobrivoje Radovanović, Belgrade, CIDD , ISBN 978-86-80113-84-5, 299-312,
6. Dimić, N., Isaković, Lj. (2008): Comparison of the level of adoption of antonyms in hearing impaired children and regular hearing children, Verbal communication disorders-prevention, detection, treatment, (ISBN 978-86-81879-19- 1, IEPSP, PALO, Patra, Belgrade, pp. 328-344.,
7. Radić Šestić, M., Dimić, N., Šešum, M., (2012). The Beginnings of Education of the Deaf Persons: Renaissance Europe XIV-XVI century, Special Education and Rehabilitation, 11, 147-165.

Number of active classes per week	

Lectures: 3	**Research work**: 10	
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	**Points**	**Final exam**	**Points**
Research project	30	Written exam	
Seminars	20	Oral exam	50