

Study program: Speech and language pathology			
Type and level of studies: Doctoral academic studies			
Title of the subject: Quantitative and qualitative research methods			
Lecturer: Predrag R. Teovanović; Tatjana S. Mentus			
Course status: Obligatory			
ECTS: 20			
Prerequisites: No prerequisites			
Aim This course is primary aimed to provide deeper understanding of methodological pluralism and various tools and techniques available to researchers in speech and language pathology field. Also, course is designed to equip students with knowledge and sets of skills necessary to design and carry out quantitative studies and to report on their results in accordance with standards of academic writing.			
Outcomes After the completion of the course, students should be able to: (1) differentiate between quantitative and qualitative research methods; (2) distinguish between various theoretical frameworks that shape studies; (3) articulate own research interests, specify structured research questions and write research proposal; (4) understand concepts of study validity, finding reliability and evidence based practice; (5) search various bibliographic databases effectively; (6) critically review empirical research; (7) select adequate instrument and collect empirical data; (8) create and organize datasets; (9) perform statistical analysis of empirical data; (10) communicate research findings, implications and recommendations for future inquiry and practice through written products and oral presentations; and (11) routinely apply APA style to written work.			
Contents <i>Lectures</i> Qualitative paradigm (epistemological and axiological assumptions). Main types of qualitative studies (case study, action research, grounded theory, phenomenological approach, content, narrative and discourse analysis). Indicators of qualitative studies' quality. Quantitative paradigm (scientific method, methodological pluralism, experimental and correlational research, nomothetic and idiographic approach). Core elements of quantitative research (sample, variables, measurement, data). Research design and research proposal. Creating and managing datasets. Descriptive statistics. Normal distribution. Central limit theorem. Inferential statistics. Parameter estimation. Parametric and non-parametric tests. Basic statistical tests (chi-square, t-test, ANOVA, correlations, and regression analysis). Multivariate statistical tests (principal component analysis, factor analysis, canonical correlational and canonical discriminant analysis). Data analysis techniques for single subject research. Structure of research article. Scientific writing. <i>Practical work</i> Review of research article. Writing research proposal. Construction of data collection instrument. Data collection. Statistical analysis. Writing research report.			
Literature: 1. Mertens, D., & McLaughlin, J. (2008). <i>Research and Evaluation Methods in Special Education</i> . Corwin Press, California. 2. Rumrill, P. D., Cook, B. G., & Wiley, A. L. (Eds.). (2011). <i>Research in Special Education: Design, Methods, and Applications</i> . Springfield, IL: Charles C Thomas Publisher. 3. Stoner, J. (2010). Qualitative Research in Education: Other Methods of Seeking Knowledge. <i>Current Issues and Trends in Special Education</i> , 20, 19 – 39. 4. Thurlow, M., Foster, C., & Rogers, C. (2010). Scientifically supported interventions. <i>Current Issues and Trends in Special Education</i> , 19, 199 – 212. 5. Field, A. (2013). <i>Discovering statistics using IBM SPSS statistics</i> . Sage. 6. VandenBos, G. R. (Ed). (2010). <i>Publication manual of the American Psychological Association (6th ed.)</i> . APA, Washington, DC.			
Number of active classes per week		Lectures: 2	Research work: 5
Teaching methods: Lectures, group discussions, individual assignments, project-based learning			
Evaluation of knowledge (maximum score 100)			
Pre obligations	Points	Final exam	Points
Research project	40	Written exam	20
Seminars	20	Oral exam	20