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|--|--|--|-----------------------------------|----------------|-----------|----|--|
| Study program  |  | Level of studies                             | Third cycle                       |                |           |    |  |
|  |  | Title of the study program                   | Science and mathematics education |                |           |    |  |
| <b>COURSE</b>  |  |  |                                   |                |           |    |  |
| Course title   |  | <b>Methodology of Educational Research I</b> |                                   |                |           |    |  |
| Course ID  | Semester   | Course status                                | ECTS credits                      | Contact hours  |           |    |  |
| EDU601   | I  | Mandatory                                    | 9                                 | 75             |           |    |  |
| Lecturers  | Lecturer in charge   | Prof. dr. Nermin Đapo                        |                                   |                |           |    |  |
|  | Other lecturers  | Prof. dr. Senada Kalabušć                    |                                   |                |           |    |  |
| Course aims  | Becoming familiar with the most used quantitative research methods in educational research<br>Developing knowledge and skills to design and conduct research.  |  |                                   |                |           |    |  |
| <b>CONTENT</b>   |  |  |                                   |                |           |    |  |
| #  | Teaching units   | Contact hours                                |                                   |                |           |    |  |
|  |  | L  | E/S                               | C              |           |    |  |
|  | <ul style="list-style-type: none"> <li>• Introduction to methodology of educational research</li> <li>• Variables, measurement, scale of measurement</li> <li>• Metric characteristics of instruments (Reliability, validity, discrimination)</li> <li>• Research process steps</li> <li>• Quantitative research methods (experiment, causal-comparative research, correlational study, survey study)</li> <li>• Internal and external validity</li> <li>• Research design</li> <li>• Statistical methods (descriptive statistics, distribution and probability, hypothesis testing, t-test, ANOVA, correlation and regression)</li> </ul> | 30   | 45                                |                |           |    |  |
| <b>LITERATURE</b>  |  |  | <b>ASSESSMENT OF LEARNING</b>     |                |           |    |  |
| <ol style="list-style-type: none"> <li>1. Goran Milas (2005) <i>Istraživačke metode u psihologiji i drugim društvenim znanostima</i>. Naklada Slap, Jastrebarsko.</li> <li>2. Jack R Fraenkel, Norman E. Wallen (2008). <i>How to Design and Evaluate Research in Education</i>, 7<sup>th</sup> edition. McGraw Hill Higher Education.</li> <li>3. Anthony M. Graziano, Raulin, Michael L (2009). <i>Research Methods: A Process of Inquiry</i>, 7<sup>th</sup> edition. Allyn &amp; Bacon.</li> <li>4. John Creswell (2007). <i>Planning, Conducting, and Evaluating Quantitative and Qualitative Research: International Edition</i>, 3<sup>rd</sup> edition. Prentice Hall.</li> <li>5. Sawyer, R.K. (Ed.). (2006). <i>The Cambridge Handbook of the Learning Sciences</i>. Cambridge University Press.</li> <li>6. Slavin, R.E. (2006) <i>Educational Psychology: Theory and Practice</i> (Edition 8), Allyn &amp; Bacon, Boston.</li> </ol> |  |  | Assessment method                 | Points         | Threshold |    |  |
|  |  |  | 1.                                | Partial exams  | 30        | 16 |  |
|  |  |  | 2.                                | Seminar papers | 30        | 17 |  |
|  |  |  | 3                                 | Final exam     | 40        | 22 |  |
|  |  |  | 4.                                |                |           |    |  |
| Total  |  |  | 100                               | 55             |           |    |  |