| NAME OF THE COURSE | Research Work in Informatics Education | | | | | |
|---|---|---|---|---|---|---|
| **Code** | PMIK65 | Year of study | GU-2 | | | |
| Course teacher | izv. prof.dr. sc. Ivica Boljat | Credits (ECTS) | 2,5 | | | |
| Associate teachers | Monika Mladenović<br>Marin Aglić Čuvić mag. educ. inf.<br>pred. Divna Krpan | Type of instruction (number of hours) | L | S | E | F |
| | | | 15 | | 15 | |
| Status of the course | | Percentage of application of e-learning | | | | |

| COURSE DESCRIPTION | | |
|---|---|---|
| Course objectives | Explore literature for selected areas of IT education research (eg teaching methods, visualization systems, educational technology, etc.), write a literature review for the selected area, and create a research plan. | |
| Course enrolment requirements and entry competences required for the course | Completed Method of teaching computer science II | |
| Learning outcomes expected at the level of the course (4 to 10 learning outcomes) | After passing the course, students will be able to:<br>- Discuss areas of information education and open research issues<br>- Describe the steps in carrying out the literature review<br>- Recognize scientific papers that are relevant to the implementation of their own research work<br>- Identify research questions, applied methodology and research findings<br>- Create an overview of the area<br>- Develop a plan for carrying out its own research<br>- Discuss the decisions made in the design of the research plan | |
| Course content broken down in detail by weekly class schedule (syllabus) | 1. Getting acquainted with the areas of research in informatics education (2 + 0)<br>2. Research Planning Phases (2 + 0)<br>3. Examples and analysis of existing research in education from selected IT fields (7 + 0)<br>4. How to write literature review (2 + 0)<br>5. Analysis of Existing Literary Examinations (2 + 0)<br>6. Presentations of student seminars and research plans (0 + 15) | |
| Format of instruction | ☒ lectures<br>☒ seminars and workshops<br>☐ exercises<br>☐ on line in entirety<br>☐ partial e-learning<br>☐ field work | ☐ independent assignments<br>☐ multimedia<br>☐ laboratory<br>☐ work with mentor<br>☐ homework assignments |
| Student responsibilities | Attending lectures.<br>Creating seminar work.<br>Design (and conduct) research | |

<table>
<tr><td>Screening student work (name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)</td><td colspan="6"><table>
<tr><th>Name</th><th>Ects</th><th>Name</th><th>Ects</th><th>Name</th><th>Ects</th></tr>
<tr><td>Class attendance</td><td>0,7</td><td>Research</td><td></td><td>Experimental work</td><td></td></tr>
<tr><td>Oral exam</td><td></td><td>Report</td><td></td><td>Homework assignments</td><td></td></tr>
<tr><td>Seminar essay</td><td>1,8</td><td>Essay</td><td></td><td></td><td></td></tr>
<tr><td>Tests</td><td></td><td>Practical training</td><td></td><td></td><td></td></tr>
<tr><td>Written exam</td><td></td><td>Project</td><td></td><td></td><td></td></tr>
</table></td></tr>
<tr><td>Grading and evaluating student work in class and at the final exam</td><td colspan="6">Research plan (30%), seminar work and presentation (70%).</td></tr>
<tr><td>Required literature (available in the library and via other media)</td><td colspan="6"><table>
<tr><th>Title</th><th>Number of copies in the library</th><th>Availability via other media</th></tr>
<tr><td>Sally Fincher, Marian Petre: Computer Science Education Research, 2004.</td><td>1</td><td></td></tr>
<tr><td>Orit Hazzan, Tami Lapidot, Noa Ragonis: Guide to Teaching Computer Science: An Activity-Based Approach</td><td>1</td><td>da</td></tr>
</table></td></tr>
<tr><td>Optional literature (at the time of submission of study programme proposal)</td><td colspan="6">Journals. Computers & Education, ACM Transactions on Computing Education The Computer Science Education<br>Copnferences: SIGCSE (Special Interest Group on Computer Science Education) ITiCSE (Innovation and Technology in Computer Science) ISSEP (Informatics in Secondary Schools: Evolution and Perspective)</td></tr>
<tr><td>Quality assurance methods that ensure the acquisition of exit competences</td><td colspan="6">Conversation with students, student evaluation using anonymous poll, student success on exams, self-assessment,</td></tr>
<tr><td>Other (as the proposer wishes to add)</td><td colspan="6"></td></tr>
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