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|  **UNIVERSITY OF NIŠ** |
| **Course Unit Descriptor** | **Faculty**  | **Faculty of Sciences and Mathematics** |
| **GENERAL INFORMATION** |
| Study program  | **Physics** |
| Study Module (if applicable) | **1. General Physics,** **2. Applied Physics,** **3. Physics-informatics** |
| Course title | **Methodology for solving physics problems** |
| Level of study | [ ] Bachelor [x]  Master’s [ ]  Doctoral |
| Type of course | [ ]  Obligatory [x]  Elective |
| Semester  |  [ ]  Autumn [x] Spring |
| Year of study  | First |
| Number of ECTS allocated | 5 |
| Name of lecturer/lecturers | Ivan Mančev |
| Teaching mode |  [x] Lectures [ ] Group tutorials [ ]  Individual tutorials [ ] Laboratory work [ ]  Project work [ ]  Seminar [ ] Distance learning [ ]  Blended learning [ ]  Other |
| **PURPOSE AND OVERVIEW (max. 5 sentences)** |
| When setting the goal of this subject we had in mind that only  **by solving physics problems we can understand Physics laws and we can understand how to apply them.** We understand Physics – it means that we can solve physics problems. At the same time to understand physics we need to solve as many physics problems as possible. |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** |
|  There are few general rules we need to follow when we solve **Physics Problems.** Such as:* **drawing the picture of the -** the correct picture of physics problem is more then 80 % of success**.**
* **having the same** [units](http://www.solvephysics.com/units.htm) **in the problem;**
* **checking the dimensionality of analytical expressions.**

Solving selected problems from general physics with special attention to different methods of solving the same problem. |
| **LANGUAGE OF INSTRUCTION** |
| [x] Serbian (complete course) [ ]  English (complete course) [ ]  Other \_\_\_\_\_\_\_\_\_\_\_\_\_ (complete course)[ ] Serbian with English mentoring [ ] Serbian with other mentoring \_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| **ASSESSMENT METHODS AND CRITERIA** |
| **Pre exam duties** | **Points** | **Final exam** | **points** |
| **Activity during lectures** | **7** | **Written examination** | **40** |
| **Practical teaching** |  | **Oral examination** | **25** |
| **Teaching colloquia** | **28** | **OVERALL SUM** | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** |