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|--|-------------------------|--------------------------|---------------|
| Study Program: Physics   |                         |                          |               |
| Type and level of studies: Bachelor studies  |                         |                          |               |
| Course name: Physics Teaching Methodology 2  |                         |                          |               |
| Lecturer: Adrović Feriz  |                         |                          |               |
| Status: Compulsory   |                         |                          |               |
| ECTS: 6  |                         |                          |               |
| Attendance prerequisites: Pedagogy with Psychology   |                         |                          |               |
| Course aims  |                         |                          |               |
| The students should gain experience and the ability to teach independently through practical work done under the teacher's guidance in natural school conditions.  |                         |                          |               |
| Course outcome   |                         |                          |               |
| The students are able to conduct teaching independently.   |                         |                          |               |
| Course content   |                         |                          |               |
| Theoretical part   |                         |                          |               |
| Development of physics and its modern trends in the teaching process. Development of physics as a subject. Contemporary physics in teaching. The process of knowledge and worldview formation. General principles. Graduality and systematicity in the process of forming opinions. Unity of theory and practice in the process of forming a scientific opinion. Matter and motion as a basic problem in physics. Methodological procedures in the process of describing phenomena. Basic teaching content of teaching physics. Mechanical motion. Newton's laws. The importance of studying Newton's laws for the shaping of a scientific opinion. Conservation law. Molecular phenomena. Fields. The nature of light. Basic problems of atomic and nuclear physics. Developing and forming opinions in physics teaching. Development of physical, scientific and technical thinking in teaching. The importance of physical laws in the development of students' opinions. Definition as a form of expression. Methodology of processing physical laws and theories. Use of mathematics in physics teaching. Correlation of physics with other subjects. |                         |                          |               |
| Practical Part:  |                         |                          |               |
| Written and practical preparation for teaching physics.  |                         |                          |               |
| Literature   |                         |                          |               |
| 1. Milan Raspopović: Metodika nastave fizike, Zavod za udžbenike i nastavna sredstva, Beograd, 1992.   |                         |                          |               |
| 2. Tomislav Petrović: Didaktika fizike, Fizički fakultet, Beograd, 1994.   |                         |                          |               |
| 3. Đorđe Basarić: Metodika nastave fizike, Naučna knjiga, Beograd, 1979.   |                         |                          |               |
| 4. Vladimir Poljak: Didaktika, Školska knjiga, Zagreb, 1980.   |                         |                          |               |
| Udžbenici fizike za osnovnu i srednju školu  |                         |                          |               |
| Number of active classes   |                         |                          | Other classes |
| Lectures:<br>2   | Practical classes:<br>2 | Other forms of teaching: |               |
| Teaching methods   |                         |                          |               |
| Lectures (2 classes per week during the semester), practical classes in classroom conditions (2 classes per week during the semester).   |                         |                          |               |
| Assessment (maximum 100 points)  |                         |                          |               |
| Course assignments   | points                  | Final exam               | Points        |
| Lectures   | 10                      | oral exam                | 50            |
| Practical classes  | 40                      |                          |               |
| Term tests   |                         | .....                    |               |
| Total  | 50                      |                          | 50            |