Course Unit Descriptor

Study Programme: Informatics and Technics in Education; Information Technology

Course Unit Title: Methodology of Teaching Informatics

Course Unit Code: OAS065

Name of Lecturer(s): Professor Dragana Glušac, PhD

Type and Level of Studies: Undergraduate Academic Studies

Course Status (compulsory/elective): Elective

Semester (winter/summer): Summer

Language of instruction: English

Mode of course unit delivery (face-to-face/distance learning): Face-to-face

Number of ECTS Allocated: 6

Prerequisites: None

Course Aims:

The aim of the course is the methodical training of students for the teaching profession and self-management of the educational process, with a focus on IT teaching, as well as for identifying, analysing and creating a modern concept of teaching informatics. The subject has a theoretical and practical methodological aspect. Students master objectives, tasks, and principles of IT teaching. Students are acquiring practical methodical education through variety of forms of study and work through methodical exercises, which is the preparation for the subject Methodical practice. Students need to be trained for creative approaches to pedagogical problems, for critical evaluation of students' work and their work, for the introduction and acceptance of innovations in teaching practice, with appropriate upbringing work.

Learning Outcomes:

Adoption of basic methodical knowledge and skills necessary for successful preparation and management of the teaching process in achieving the goal and task of the IT curricula in elementary and secondary schools. Ability to successfully apply general pedagogical and psychological principles in various forms of teaching. Ability to define and formulate educational and specific tasks for information courses and methodical units. Skills for successful design, planning, preparation and execution of the teaching unit. Capabilities for successful selection, structuring, designing and evaluating the content required for computer training of students in accordance with the goals of IT courses.

Syllabus:

Theory

Methodology of informatics and its position within pedagogy. Characteristics of information science as a science and teaching subject. Curriculum of informatics. Didactic principles of IT teaching. Teaching methods. Teaching forms. Problem Teaching in Informatics. Planning and preparing classes. Teaching resources in IT teaching. Communication in teaching informatics. Monitoring and evaluating students' knowledge. Programming methodology. Configuring and maintaining IT cabinet in school;

Practice

Practical classes for students are carried out in a classroom under the guidance of a professor of methodology of teaching informatics. Students get acquainted with the current teaching curriculum of informatics in elementary and secondary schools. Every student on the practical classes will hold two public and several individual teaching activities. They are obliged to prepare the correct preparations for the class from the domain of informatics education. Also, students actively participate in the analysis of performed activities.

Required Reading:

1. Sotirović V.: Metodika informatike, Tehnički fakultet " Mihajlo Pupin" Zrenjanin, 2000.
2. Glušac D., Karuović D., Makitan V., Radosav D., Milanov D., „Adolescents' Informal Computer Usage And Their Expectations Of ICT In Teaching - Case Study: Serbia", Computers & Education, ISSN:0360-1315, Vol.81, pp.133-142, Elsevier

Weekly Contact Hours: 6	**Lectures:** 3	**Practical work:**3

Teaching Methods:

Lectures and students group work

Knowledge Assessment (maximum of 100 points): 100

Pre-exam obligations	points	**Final exam**	points
Class project	20	written exam	70
Regular attendance in the classes	10		