Study Program: Informatics

Type and level of studies: Bachelor studies

Course name: Methodology of teaching informatics

Lecturer: Denić M. Nebojša

Status: Compulsory

ECTS:10

Attendance Prerequisites:

Course aims

Preparing students for improving the pedagogical, psychological, didactic and methodical education in the future.

Course outcome

The students are able to successfully apply their knowledge in performing certain professional activities.

Course content

Introduction. Stages in the development of the human community. Technological development in general and the development of computer technology-parallels. Technological advancement and their effect on labour and people's lives through time. New technologies and automatic data processing methodology. Informatics in business automation today, and before as automation in production processes. Informatics as a key point in the development of a working organization. Informatics and information technology. Main computer-science subfields. Information Technology. Cybernetics. Data and information. Importance and purpose of data processing. The importance of time in processing data (information). Computational means according to the physical principles underlying the presentation of data and the execution of operations via computational tools. Types of data processing. Manual processing. Mechanographic processing. Automatic processing - five generations of computers. Three Data Transformations in Automatic Data Processing. Domains of computer application. Classification of computers and evaluation of their performance. Programming languages. Software sharing. Information systems. Data organizing. Organizing files. Databases. Informatics education. Levels of education in the field of informatics. Key points in education. Activities aimed at a successful realization of education in the field of informatics. The concept of information education in high school. Tutorial, software, specialized classroom, methodology. Additional tasks for the IT teacher. A look at the future.

Literature

1. Методика информатичког образовања, Д.Бранковић, Д.П.Мандић, Филозофски факултет, Бања Лука, "Mediagraf"

Number of	Other classes			
Lectures:	Practical	Other forms of teaching:	Students' research	
4	classes:		work	
	3			

Teaching methods

Lectures, consultations, term tests, hospitation.

Assessment (maximum 100 points)					
Course assignments	points	Final exam	points		
activity during lectures	10	written exam			
practical classes	40	oral exam	30		
term test(s)	20				
seminar(s)					
Total	70		30		