Study programme(s): Teaching Informatics (IC)

Level: master

Course title: Educational Software

Lecturers: Zoran D. Budimac, Vladimir M. Kurbalija

Status: obligatory

ECTS: 7

Requirements: None

Learning objectives

Training future teachers of informatics to understand methods and work principles of ready-made software for classroom usage, and for their handling through creation of own lectures using various tools.

Learning outcomes

Minimal: By the end of the course, students should be able to practically use educational software packages presented during the lectures, and to create their own multimedia lessons in the area of expertise.

Optimal: By the end of the course, students should be able to understand the general principles of work of educational software applications, to adjust and use in everyday teaching any software encountered in practice, to critically analyze and choose the most appropriate educational software for usage in individual fields, and to create own multimedia lessons.

Syllabus

Theoretical instruction

Basic notions and definitions. Basic elements of electronic methodologies, didactics and pedagogy. History of educational software and usage examples. Principles of creation of educational software. Analysis of meta-models of educational software. Usage of the Internet as educational media.

Practical instruction

Detailed presentation of abilities, training and usage of at least two specific educational software applications. Application of educational software for creation of electronic lessons on a given topic. Presentation of tools for using the Internet as educational media and creation of Internet electronic lesson.

Literature

Recommended: William & Katherine Horton: *E-Learning Tools and Technologies*, Wiley Publishing, Inc. 2003.

Alternative:

1. Michael Allen: *Guide to E-learning*, John Wiley & Sons, Inc. 2003.

Ruth Calvin Clark & Richard Mayer: *e-Learning and the Science of Instruction*, Pfeiffer, Imprint of John Wiley & Sons, Inc. 2003.

Weekly teaching load				Other:
Lectures: 2	Exercises: 4	Other forms of teaching:	Student research:	

Teaching methodology

Classical teaching methods are used in lectures, including the use of the video-beam and slides. All of the presentations are also available on the web-site of the Department. Through exercises, specific software applications for usage in education are presented and explained in detail, and students are prepared to use them. Through practical exercises, presented methodology is trained by students through creation of own electronic and Internet lessons. During the exercises, students' knowledge is tested with two tests, covering the material presented in lectures, and with several practical assignments.

Grading (maximum number of points 100)			
Pre-exam obligations	**points**	**Final exam**	**points**
Activities at lectures	**5**	Seminar paper	40
Activities at exercises	**5**		
Tests	**15, 15**		
Practical assignments	**10, 10**		