Course Unit Descriptor

Study Programme: Information Technologies

Course Unit Title: Educational Software

Course Unit Code: IT631

Name of Lecturer(s): Aleksandra Klašnja Milićević

Type and Level of Studies: Bachelor Academic Degree

Course Status (compulsory/elective): Elective

Semester (winter/summer): Summer

Language of instruction: Serbian (primary), English (secondary)

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

Number of ECTS Allocated: 7

Prerequisites: none

Course Aims:

Introducing students with methods and work principles of readymade software for classroom usage, and for their handling through creation of own lectures using various tools.

Learning Outcomes:

Minimum: 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.

Desirable: 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:

Theory

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.

Practice

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.

Required Reading:

Luckin, R., Puntambekar, S., Goodyear, P., Grabowski, B. L., Underwood, J., & Winters, N. (2013). *Handbook of design in educational technology*. Routledge.

Tchounikine, P. (2011). *Computer Science and Educational Software Design: A Resource for Multidisciplinary Work in Technology Enhanced Learning.* Springer.

Fenrich, P. (2014). *Practical Principles of Instructional Design, Media Selection, and Interface Design with a Focus on Computer-based Training/Educational Software*. Informing Science

Weekly Contact Hours: 5	**Lectures:** 2	**Practical work:** 3

Teaching Methods:

Classical teaching methods are used in lectures, including the use of the video-beam and slides. 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.

Knowledge Assessment (maximum of 100 points):

Pre-exam obligations	points	**Final exam**	points
Active class participation		written exam	
Practical work	30	oral exam	40
Preliminary exam(s)	30		
Seminar(s)			

The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.