

Specification for the book of courses

Study program		Electrical Engineering and Computer Science		
Module		Computing and Informatics		
Type and level of studies		Undergraduate Academic Studies		
The name of the course		Technology Enhanced Learning		
Lecturer (for lectures)		Milentijević Z. Ivan		
Lecturer/associate (for exercises)		Vojinović M. Oliver		
Lecturer/associate (for OFE)		Vojinović M. Oliver		
Number of ECTS	5	Course status (obligatory/elective)	Elective	
Prerequisites				
Course objectives				
The subject goal is to enable students to: acquire knowledge about current learning support platforms, adopt main learning paradigms; learn basics on planning, development and implementation of learning support platforms and components.				
Course outcomes				
At the end of the course a student will be able to apply information technologies to education, to make the choice on appropriate technology for the specific learning environment and goals, and to set up, manage and adjust components and systems to support the educational process.				
Course outline				
Theoretical teaching				
Modern learning support platforms; history of learning support technologies; technology enhanced learning concept. E-learning, m-learning, e-testing and personalized learning and testing. Learning paradigms and various learning support technologies. Organizational aspect of learning support technology. Pedagogical, psychological and sociological aspects of e-learning. Open learning. Technology support for instructional design. Learning Management Systems (LMS), Virtual Learning Environments (VLE), multimedia and multimodal components for learning, intelligent tutoring systems. Computer games and gamification principles in learning.				
Practical teaching (exercises, OFE, study and research)				
Hardware and software infrastructure for learning support platforms. Selection of technology, design and development of learning support environment. Learning management systems - architecture, components, maintenance and customization. Virtual learning environments. Technology support for instructional design. Application of gamification and computer games in learning.				
Textbooks/references				
1	Joy L. Egbert, Supporting Learning with Technology, Pearson/Merrill/Prentice Hall, 2009.			
2	S. Alessi, S. Trollip, Multimedia for Learning: Methods and Development, Allyn and Bacon, 2001.			
3	Timothy K. Shih, Jason C. Hung, Future Directions in Distance Learning and Communication Technologies, IGI Global, 2006.			
4				
5				
Number of classes of active education per week during semester/trimester/year				
Lectures	Exercises	OFE	Study and research work	Other classes
2	2	1	0	0
Teaching methods				
Lectures, consultation, homeworks and projects, seminars (project presentation and discussion).				
Grade (maximum number of points 100)				
Pre-exam duties	Points	Final exam		Points
Activity during lectures	10	Written exam		
Exercises	10	Oral exam		40
Colloquia				
Projects	40			