Subject code	Credits
INF4022	4

Title

REALAUS LAIKO SISTEM   INTERNETE INŽINERIJA

Title in English

INTERNET REAL-TIME PROCESS ENGINEERING

Subject goal and annotation

Innovations in web development, computing contribute to the extent of technology applications that have never been seen before. New media is an important shift, as it summarizes the importance of interaction, the consumer and the community. This is both theoretical and practical course. Students acquire knowledge on publishing media in the Web, and get experience in discussing problems and prospects of journalism for the Information Age. Practical seminars combine Multimedia system design, interactive media production principles, products, and understanding of the contexts of interactive media production and technologies.

Prerequisites

No prerequisites

Relationship between the learning outcomes of the Programme and learning outcomes of the subject

Learning outcomes of the Programme	Learning outcomes of the subject	Criteria for measuring the achievement of learning outcomes
4. Knowledge of basic and advanced multimedia theories and applications, ability to apply it. 6. Knowledge of Internet and multimedia products development, their commercial and social impact	Understanding of modern interactive multimedia technologies.	Concepts of visual on-line streaming techniques should be described and compared.
9. Perform interdisciplinary research and development/creation in multimedia area, apply results in practical applications.	Develop and implement a creative on-line streaming project, using crucial media technologies and technique.	Creative project developed, implemented and presented in class.
11. Analysis, design and development of advanced Multimedia systems. 13. Ability to analyse the newest trends in Internet and multimedia systems (and general computer science and digital arts) and apply them in development of novel systems.	Analyse, interpret and discuss theoretical and practical issues in web multimedia techniques, suitable for on-line streaming.	Cases of theoretical and best practice examples. Analytical and empirical methods, different practical perspectives.
18. Critical analysis of Internet and multimedia projects context and their influence to business, culture and society.	Ability to apply theoretical and practical knowledge in web communication network.	Students presents the practical works to lecture and their colleagues

Subject content

	Lecture topics and contents	Hours
1.	Introduction. On-line streaming technology. The simple proposals. Security.	3
2.	Picture, audio and video recording. On-line streaming parameters such as White balancing, Lightening, Compositing, Noise reduction, "Green Wall".	14
3.	Speaking to audience and language to use. Practical examples of good and bad speech.	2
4.	Journalistic ethics.	2
5.	Preparing recorded Multimedia Works for Internet broadcast.	3
6.	Hosting of Multimedia Works. Cloud solutions.	6
	Total	**30**

Practical work contents

Two practical problems. Each of them should be presented and described.
1. Creative project pithing
2. Creative project public presentation

Evaluation of study results

Final exam task (50%), mid-term exam task (17%), and assessments for practical project (33%).

Distribution of subject study hours

Lectures	30
Creative Project	30
Individual studies (including studies in groups, preparation for the mid-term and final exams)	44
Total	**104**

Recommended literature

No	Authors of publication and title	Number of copies available		
		in the Library of VMU	in specialized publication collections at VMU	in other libraries
Basic materials				
1.	Lister, M. New media: a critical introduction. 2009, Routledge.	1	3	
2.	Engebretsen, M Writing for the Web: An introduction to online journalism. VMU Press 2006	20	3	4
Supplementary materials				
1.	Rose, G. Visual Methodologies: An Introduction to the Interpretation of Visual Materials. 2001., Sage, New York.			
2.	Mark Briggs (2007). Journalism 2.0: How to Survive and Thrive.	Available as free PDF-file at http://www.kcnn.org/resources/journalism_20_pdfs		
3.	Larry Kless s No Second Chances, Part 2: Best Practices for Live Events‰ 2013.	Available on internet www.streamingmedia.com		
4.	Jan Ozer. s Encoding.com: Streaming	Available on internet free of charge.		

	Media's Comprehensive Hands-On Review‰2013.	www.streamingmedia.com
5.	Jeff Fissel ‚4 Ways to Secure Your Online Video‰2012.	Available online: http://streamingvideoplatform.com
	Saurabh Goel, ‚Cloud-Based Mobile Video Streaming Techniques‰2012.	Available online: http://airccse.org/journal/jwmn/0213wmn07.pdf

Subject prepared and coordinated by

Doc.dr. G Razkinis