Course Name : Multimedia

Course Code	Course Type	Regular Semester	Lecture (hours/week)	Seminar (hours/week)	Lab. (hours/week)	Credits	ECTS
IMC 301	B	Fall	3.00	0.00	0.00	3.00	5.00

Lecturer	Alban Tufa, MSc
Assistant	
Course language	Albanian
Course level	Bachelor
Description	In this course students will be introduced to the current principles and technologies of combined systems, text, graphics, sound, animation and video. Students will also learn how to develop various multimedia programs. Another goal is to learn how images, sounds and videos can be digitized through various programs. Students, in addition to theoretical knowledge about multimedia applications, will engage in individual and group projects to master the latest techniques.
Objectives	
Core Concepts	1. Multimedia 2. Text 3. Voice 4. Image 5. Content 6. Video 7. Editim

Course Outline

Week	Topic
1	Course presentation In this week students are introduced to the syllabus, topics are discussed that will contain the entire course, assessment items, including tests, projects. Also during this lecture, students are introduced to the basic literature, support literature, tools needed during the course, as well as the necessary programs for the continuation.
2	Introduction to multimedia, basics and basic concepts. Multimedia Theory. In this lecture, students are introduced to multimedia as a concept and its meaning, its elements, its short history of multimedia, the difference between the concepts "Media", "Old Media", "New Media", "Digital Media" and "Hypermedia", the types of multimedia devices, multimedia and internet. Also during this lecture are treated multimedia platforms and the application of multimedia in everyday life such as: Video On Demand; Video Streaming; Multimedia Mail; Multimedia Conferencing; Interactive TV; Media editors; Social media and Mobile Media. Fundamentals of Multimedia, Ze-Nian Li; Mark S. Drew; Jiangchuan Liu, Springer 2014, Second Edition, Switzerland, pages 3-16 “Elements of Multimedia”, Sreeparna Banerjee CRC Pres 2019, New York, pages 1-15
3	Multimedia applications and programs, their principles and structure. Throughout this lecture students will be introduced to the types of multimedia programs starting with internet based programs (online), and moving on to offline programs. The lecture will address the features of each type of program, the ways of working and their main principles. In terms of online treatment programs CANVA will be taken; CHLIPCHAMP and CRELLO, while offline Adobe and Filmora Ëondeshare packages will be treated. At the end of the lecture students will address the aspects of multimedia creation; multimedia presentation, multimedia product; as well as multimedia distribution, taking into account suitable formats to be shared on multimodal media. Fundamentals of Multimedia, Ze-Nian Li; Mark S. Drew; Jiangchuan Liu, Springer 2014, Second Edition, Switzerland, pages 16-25 “Elements of Multimedia”, Sreeparna Banerjee CRC Pres 2019, New York, pages 15-23
4	Text in multimedia. Basic principles. The lecture addresses the importance of text in multimedia products, text types, fonts, constituent elements in text, text formats and graphics. The lecture further analyzes the aspects of Text Design; ways to represent text, effective ways to use text, advantages and disadvantages of using text, encryption and decryption, emotions and emoji, text on mobile devices. At the end, the text storage formats are listed and treated. “Elements of Multimedia”, Sreeparna Banerjee CRC Pres 2019, New York, pages 25-37

5	Basic audio concepts and principles. Digital audio and voice interfaces. This lecture will address the basic concepts of sound: amplitude; frequency; wrapping; voice features, voice digitization, MIDI concept, sound codes, audio filtering, sound quality and data rate, recording equipment, sound interfaces and music-playing devices. The lecture also deals with audio formats at the end. “Elements of Multimedia”, Sreeparna Banerjee CRC Pres 2019, New York, pages 39-66 Fundamentals of Multimedia ”, Ze-Nian Li; Mark S. Drew; Jiangchuan Liu, Springer 2014, Second Edition, Switzerland, pp. 140-176
6	Presentation with graphic and image data. Image in Multimedia Throughout this lecture the principles of image will be analyzed; image types: bitmap images and vector graphics images; 1 bit images; 8 bits and 24 bits; pixels and types of images. Also in this lecture will be treated the most popular image storage formats (JPEG, GIF, PNG, TIFF, PDF, etc.); color and its importance in images. Differences between artistic photography and advertising photography. The lecture also deals with games and image formats on mobile devices. Fundamentals of Multimedia, Ze-Nian Li; Mark S. Drew; Jiangchuan Liu, Springer 2014, Second Edition, Switzerland, pp. 53 - 100 “Elements of Multimedia”, Sreeparna Banerjee CRC Pres 2019, New York, pp. 67-79
7	Basic video concepts and principles. Digital video and screen interfaces In this lecture students will be introduced to the basic concepts of video; video colors; types of video signals; analog video and digital video; registration formats; types of digital video, recording equipment and electronic screen equipment. Also during the lecture students will address concepts and formats related to video and television as well as video on mobile devices. Fundamentals of Multimedia ”, Ze-Nian Li; Mark S. Drew; Jiangchuan Liu, Springer 2014, Second Edition, Switzerland, pp. 115-137 “Elements of Multimedia”, Sreeparna Banerjee CRC Pres 2019, New York, pages 81-91
8	Semi-final exam
9	Multimedia, animation and computer graphics The lecture deals with the basic concepts of animation, the specifics of animation, screens and animation, the most common tools for animation, virtual reality, animation characters, motion graphics, visual effects, computer graphics, 2D animation and 3D animation. “Elements of Multimedia”, Sreeparna Banerjee CRC Pres 2019, New York, pp. 93-104
10	Storage of multimedia products. Multimedia storage is an important concern in the development of multimedia products because a large amount of storage is required due to the presence of broadcast media such as audio and video in addition to static media. Even static media like images consume a considerable amount of memory space. There are two aspects of storage, namely, storage devices, as well as storing data in databases. The first part of this lecture discusses storage devices. The last second part of the lecture describes the retrieval of content from databases, with special reference to images “Elements of Multimedia”, Sreeparna Banerjee CRC Pres 2019, New York, pp. 149-162
11	Creating multimedia products The lecture analyzes the ways of creating multimedia products, the ADDIE model, the design phases, multimedia authoring, the elements of multimedia presentation: graphic styles, color principles, fonts, hypermedia and hypertext, the Multimedia and Hypermedia Expert Group (MHEG). “Elements of Multimedia”, Sreeparna Banerjee CRC Pres 2019, New York, pp. 133-147
12	Storytelling in fun This lecture deals with the importance of telling entertaining stories in multimedia communication, such as feature films of various types and lengths, telling other short stories. The lecture also addresses the ways in which these models of communicating with audiences are constructed, their key features and principles. The treatment takes artistic photos, various video art, video clips, booktriler, and the essential elements that make them up. Multimedia Storytelling for Digital Communicators in a Multiplatform World ”, Seth Gitner, Routlege 2016, New York, pp. 227-376
13	Storytelling in journalism This lecture deals with the importance of telling stories of a journalistic nature, how to build a chronicle, the importance of fact fact, the importance of image fact, voice fact, and other facts needed for a full multimedia reporting. The importance of objectivity and impartiality, as well as the importance of ethics in the production of journalistic products. Multimedia Storytelling for Digital Communicators in a Multiplatform World ”, Seth Gitner, Routlege 2016, New York, pp. 227-376

14	Storytelling in strategic communication This lecture will address the theoretical aspects of image narration in the strategic communication approach (advertising). During the lecture will be addressed the important multimedia aspects of telling about an organization, conveying an idea, communicating a product or service, etc. Further, the importance of multimedia storytelling in strategic communication, or the construction of multimedia advertising, will be addressed. Multimedia Storytelling for Digital Communicators in a Multiplatform World ", Seth Gitner, Routlege 2016, New York, pp. 227-376
15	Presentation of projects
16	Final Exam

Prerequisites	The student must attend the course at a minimum rate of 75%.
Literature	• "Fundamentals of Multimedia", Ze-Nian Li; Mark S. Drew; Jiangchuan Liu, Springer 2014, Botimi i dytë, Switzerland • "Elements of Multimedia", Sreeparna Banerjee CRC Pres 2019, New York
References	• "Multimedia Storytelling for Digital Communicators in a Multiplatform World", Seth Gitner, Routlege 2016, New York • "Multimedia: Making It Work", Tay Vaughan, Mc Graw Hill 2011, London • "Digital Communication Communication, Multimedia, Security" Meinel, • "Digital Communication Communication, Multimedia, Security" Meinel, Christoph; Sack, Harald, Spriger 2014, New York • https://www.tutorialspoint.com/multimedia/index.htm

Course Outcome

1	Studentët do të jenë në gjendje të identifikojnë parimet e produkteve multimediale.
2	Të dallojnë karakteristikat e produkteve multimediale dhe të ekzutojnë projektet.
3	Të analizojnë në mënyrë kritike projektet personale dhe punën e të tjerëve
4	Të demonstrojnë aftësitë themelore të multimedias.
5	Të krijojnë produksione multimediale të sakta dhe tërheqëse.

Course Evaluation		
In-term Studies	**Quantity**	**Percentage**
Midterms	1	20
Quizzes	0	0
Projects	0	0
Term Projects	1	30
Laboratory	0	0
Class Participation	1	10
Total in-term evaluation percent		**60**
Final exam percent		**40**
Total		**100**

ECTS Workload (Based on Student Workload)			
Activities	**Quantity**	**Duration (hours)**	**Total (hours)**
Course duration (Including the exam week: 16x Total hours of the course)	16	3	48
Study hours outside the classroom (Preparation, Practice, etc.)	14	5	70
Duties	1	2	2
Midterms	1	2	2
Final Exam	1	3	3
Other	0	0	0
Total Work Load			**125**
Total Work Load / 25 (hours)			**5.00**
ECTS			**5.00**