

FAKULTI TEKNOLOGI DAN KEJURUTERAAN

PROGRAM	Diploma in Computer Network	
COURSE NAME	Multimedia System	
COURSE CODE	DNC 4013	
CREDIT HOUR	3	
SYNOPSIS	This course emphasizes to understanding of multimedia system and multimedia development using multimedia project management technique. Principle and topic in this course cover multimedia components, devices and multimedia software, online multimedia, multimedia group development and multimedia project management.	
COURSE STRUCTURE		
CHAPTER	TOPICS	
1	Introduction to Multimedia	
	1.1 Definition Video	
	1.2 Elements of multimedia systems	
2	Multimedia applications in a variety of fields	
	2.1 Education	
	2.2 Business	
	2.3 Administration	
	2.4 Entertainment	
	2.5 Other	
3	Computer Hardware and Multimedia	
	3.1 Multimedia hardware	
	3.2 Multimedia computer systems	
	3.3 Additional tool for multimedia systems	



4	Text elements in Multimedia
	4.1 What is text
	4.2 Typeface and font
	4.3 Features text
	4.4 How it is stored in the computer
5	Graphic elements in Multimedia
	5.1 Category graphic
	5.2 Quality chart
	5.3 Graphics file formats
	5.4 Graphics software
6	Audio elements in Multimedia
	6.1 Introduction
	6.2 The concept of analog and digital audio wave
	6.3 The use of audio in the multimedia
	6.4 Sampling
	6.5 Digital audio file formats
	6.6 Audio software
	6.7 MIDI
7	Video elements in Multimedia
	7.1 Introduction
	7.2 Analog video and digital video
	7.3 Quality factors digital video
	7.4 File size
	7.5 Digital video file formats
	7.6 Software video



8	Elements of Animation in Multimedia
	8.1 Introduction
	8.2 The techniques of animation production
	8.3 Categories of computer animation
	8.4 Special effects animation
	8.5 Digital animation file formats
	8.6 Animation software
9	Interactivity in Multimedia elements
	9.1 Introduction
	9.2 The concept of interactivity in multimedia
10	Compression Element Multimedia
	10.1 Introduction of compression
	10.2 The purpose of compression
	10.3 Compression technique
	10.4 Standards compaction
11	Multimedia Computer Networks
	11.1 Requirements of storage and broadband multimedia
	11.2 The multimedia computer networking architecture
	11.3 Local area networks and metropolitan area network and wide area networking
12	Multimedia Application Development Process
	12.1 Team of multimedia systems development
	12.2 A systematic approach to the development of multimedia applications
	12.3 Instructional Design Model



13	Multimedia Application Development Process
	13.1 The phases of the software development process
	13.2 Planning and Analysis
	13.3 Design - (Storyboard)
	13.4 Development and Implementation
	13.5 Testing and evaluation
14	Multimedia Development Project Management
	14.1 The preservation and dissemination of Multimedia Software
References:	Agustin Rubini 2017. Fintch in a Flash. Financial Technology Made Easy. McGraw-Hill
	Ze-Nian Li and Mark S.Drew, 2016. Fundamental of Multimedia 2nded, Springer1.
	3. Nick Abbott, Richard Jones, Matt Glaman, Chaz Chumley, 2016, Drupal 8: Enterprise Web Development, Packt Publishing, (ISBN 10:1-78728-153-1)
	4. J. Mark Locklear, 2016, Learning Rails 5, O'Reilly Media. (ISBN 10: 1-4919-26198)