



UNIVERSITI TEKNOLOGI MARA

ECE551: MULTIMEDIA SYSTEMS AND APPLICATIONS

Course Name (English)	MULTIMEDIA SYSTEMS AND APPLICATIONS APPROVED
Course Code	ECE551
MQF Credit	3
Course Description	This course provides students with the essential knowledge on multimedia systems and applications. To develop knowledge and understanding of the underlying hardware and software developments which enable multimedia technology developments.
Transferable Skills	This course provides students with the essential knowledge on multimedia systems and applications. To develop knowledge and understanding of the underlying hardware and software developments which enable multimedia technology developments.
Teaching Methodologies	Lectures, Blended Learning, Lab Work, Tutorial
CLO	CLO1 Describe concepts of multimedia technology and applications, internet and web publishing. CLO2 Develop basic multimedia applications, internet web application using available authoring tools. CLO3 Utilize the concept of Intellectual Property Rights in designing multimedia applications.
Pre-Requisite Courses	No course recommendations
Topics	
1. Introduction to Multimedia 1.1) Briefing on Course Description. 1.2) Briefing on Blended Learning & I-learn System. 1.3) Introduction to Multimedia 1.4) History of Multimedia 1.5) Multimedia/ Hypermedia 1.6) Multimedia Systems (characteristics, challenges, features, components)	
2. Text 2.1) Digital Representation of Text	
3. Images and Animation 3.1) Digital Representation of: 3.2) • Images 3.3) • Formats 3.4) • Colors and resolution 3.5) • Usage and Applications	
4. Sound 4.1) Digital Representation of: 4.2) • Sound 4.3) • Audio 4.4) • Sampling Technique	
5. Video 5.1) Digital Representation of: 5.2) • Video 5.3) • Compression and encryption techniques.	

6. Steps to Make Multimedia Project

- 6.1) Steps to make multimedia project
- 6.2) • Design principles
- 6.3) • Multimedia and Human-Computer Interaction
- 6.4) • Design Integration problem
- 6.5) • Multimedia skills
- 6.6) • Internet and Mobile Application
- 6.7) • Android applications, Google cloud applications, Internet of Things (IOT)

7. Software, Hardware and Authoring Tools for Multimedia

- 7.1) • Multimedia Hardware
- 7.2) • Basic software tools
- 7.3) • Authoring tools.

8. Internet Terminology and Technology

- 8.1) • Multimedia and World Wide Web
- 8.2) • Internet Terminology

9. Intellectual Property

- 9.1) Intellectual Property

Assessment Breakdown	%
Continuous Assessment	100.00%

Details of Continuous Assessment	Assessment Type	Assessment Description	% of Total Mark	CLO
	Assignment	Online Quiz	10%	CLO1
	Group Project	Project 3	10%	CLO2
	Group Project	Project 1	20%	CLO2
	Individual Project	Project 2	10%	CLO2
	Presentation	Presentations of website development	5%	CLO3
	Test	Test 1	20%	CLO1
	Test	Test 2	20%	CLO1
	Written Report	Written Report on website Development	5%	CLO3

Reading List	Recommended Text	Tay Vaughan 2014, <i>Multimedia Making It Work</i> , 9th Edition Ed., McGraw-Hill Osborne Media New York [ISBN: 978-007183288]
Article/Paper List	This Course does not have any article/paper resources	
Other References	This Course does not have any other resources	