



UNIVERSITI TEKNOLOGI MARA

CSC413: INTRODUCTION TO INTERACTIVE MULTIMEDIA

Course Name (English)	INTRODUCTION TO INTERACTIVE MULTIMEDIA APPROVED
Course Code	CSC413
MQF Credit	3
Course Description	This course will introduce the essential topics in multimedia application development. It includes concepts in hypermedia, basic process and techniques in multimedia application development such as effective combination of audio, video, animation and graphics. Beside that, the implications of data storage and retrieval methods and also the role of teamwork in multimedia application development will also be highlighted. It will also discuss on multimedia computer hardware, current multimedia software packages, multimedia application concepts, data manipulation, file formats, media storage and memory management and configurations. Applications of multimedia for mobile and the Internet will also be emphasized.
Transferable Skills	1. Describe the basic elements of interactive multimedia. 2. Demonstrate teamwork skills in multimedia application project. 3. Constructs multimedia project with authoring tools.
Teaching Methodologies	Lectures, Lab Work
CLO	CLO1 Describe the basic elements of interactive multimedia. CLO2 Demonstrate teamwork skills in multimedia application project. CLO3 Constructs multimedia project with authoring tools.
Pre-Requisite Courses	No course recommendations
Topics	
1. INTRODUCTION 1.1) 1.1 Basic definition 1.2) 1.2 Media of Delivery 1.3) 1.3 Common Usage of Multimedia 1.4) 1.4 Understanding Virtual Reality	
2. TEXT 2.1) 2.1 Importance of Text 2.2) 2.2 Attribute of Text 2.3) 2.3 Usage of Text in Multimedia 2.4) 2.4 Usage of Text in Computer 2.5) 2.5 Font Editing and Design Tools	
3. GRAPHIC 3.1) 3.1 Beginning to Create Images 3.2) 3.2 Creating Still Images 3.3) 3.3 Understanding Colors 3.4) 3.4 File Formats	
4. SOUND 4.1) 4.1 Introduction to Sound 4.2) 4.2 Multimedia System Sound 4.3) 4.3 Digital Audio 4.4) 4.4 MIDI Audio 4.5) 4.5 Comparing Digital to MIDI Audio 4.6) 4.6 Creating and Editing Digital Audio Files 4.7) 4.7 MIDI versus Digital Audio 4.8) 4.8 File Formats 4.9) 4.9 Applying Sound to Multimedia Project	

5. ANIMATION

- 5.1) 5.1 Introduction to Animation
- 5.2) 5.2 Principles of Animation
- 5.3) 5.3 Traditional Animation?
- 5.4) 5.4 Computer Animation
- 5.5) 5.5 File Formats
- 5.6) 5.6 Creating Animation

6. VIDEO

- 6.1) 6.1 Introduction to Video
- 6.2) 6.2 How Video Works and Displayed
- 6.3) 6.3 Playing Back Digital Video Files
- 6.4) 6.4 Shooting and Editing Video
- 6.5) 6.5 File Formats

7. MULTIMEDIA DEVELOPMENT

- 7.1) 7.1 Stages of Multimedia Project
- 7.2) 7.2 Project Requirements
- 7.3) 7.3 Team and Skillsets

8. HARDWARE FOR DEVELOPMENT

- 8.1) 8.1 Popular Platforms
- 8.2) 8.2 Various Type of Connections
- 8.3) 8.3 Memory and Various Storage Devices
- 8.4) 8.4 Various Input and Output Devices

9. SOFTWARE FOR DEVELOPMENT

- 9.1) 9.1 Text Editing and Word Processing
- 9.2) 9.2 OCR Software
- 9.3) 9.3 Painting and Drawing Tools
- 9.4) 9.4 3-D Modeling and Animation Tools
- 9.5) 9.5 Image-Editing Tools
- 9.6) 9.6 Sound Editing Tools

10. AUTHORIZING MULTIMEDIA ELEMENTS

- 10.1) 10.1 Introduction to Authoring Systems
- 10.2) 10.2 Types of Authoring Tools
- 10.3) 10.3 Choosing Authoring Tools
- 10.4) 10.4 Testing
- 10.5) 10.5 Preparing for Delivery

11. THE INTERNET AND MULTIMEDIA

- 11.1) 11.1 History of Internet
- 11.2) 11.2 Internetworking
- 11.3) 11.3 Making Multimedia for the Web

12. MOBILE MULTIMEDIA

- 12.1) 12.1 Digital Revolution
- 12.2) 12.2 Mobile Hardware
- 12.3) 12.3 Various Types of Connections
- 12.4) 12.4 Mobile Platform
- 12.5) 12.5 Programming Mobile Applications

Assessment Breakdown	%
Continuous Assessment	60.00%
Final Assessment	40.00%

Details of Continuous Assessment	Assessment Type	Assessment Description	% of Total Mark	CLO
	Assignment	Lab assignment	20%	CLO3
	Group Project	Project	20%	CLO2
	Test	Test 1	10%	CLO1
	Test	Test 2	10%	CLO1

Reading List	Recommended Text	<ul style="list-style-type: none"> Tay Vaughan 2014, <i>Multimedia: Making It Work, Ninth Edition</i>, 9th Edition Ed., McGraw-Hill Osborne Media [ISBN: 0071832882]
	Reference Book Resources	<ul style="list-style-type: none"> Ranjan Parekh 2013, <i>Principles of Multimedia</i>, 3rd Edition Ed., Tata McGraw-Hill Education [ISBN: 9781259006500] T. M. Savage, Karla E. Vogel 2013, <i>An Introduction to Digital Multimedia</i>, 2nd Edition Ed., Jones & Bartlett Publishers [ISBN: 144968839X] Management Association, Information Resources 2017, <i>Digital Multimedia: Concepts, Methodologies, Tools, and Applications</i>, 1st Edition Ed., IGI Global USA [ISBN: 1522538232] T. M. Savage, Karla E. Vogel 2014, <i>An Introduction to Digital Multimedia</i>, 1st Edition Ed., Jones & Bartlett Publishers [ISBN: 9781449688394] Marc van Lieshout, Tineke M. Egyedi, Wiebe E. Bijker 2018, <i>Social Learning Technologies</i>, 2nd Ed., Routledge USA [ISBN: 1351791664]

Article/Paper List	This Course does not have any article/paper resources
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Other References	This Course does not have any other resources
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