



UNIVERSITI TEKNOLOGI MARA

CSC253: INTERACTIVE MULTIMEDIA

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| Course Name (English) | INTERACTIVE MULTIMEDIA APPROVED |
| Course Code | CSC253 |
| MQF Credit | 3 |
| Course Description | This course will introduce the essential topics in interactive multimedia application development. It includes concepts in multimedia, basic multimedia elements such as text, graphics, audio, video, and animation also the requirements of multimedia project development using authoring tools. Besides that, the implications of data storage and retrieval methods and also the role of teamwork in multimedia project development will also be highlighted. It will also discuss on multimedia computer hardware and software, current multimedia authoring tools, file formats, media storage and memory management. Applications of multimedia for the Internet will also be emphasized. |
| Transferable Skills | 1. Demonstrate ability to identify and articulate self skills, knowledge and understanding confidently and in a variety of contexts. 2. Demonstrate the ability to dream, imagine and visualize. 3. Demonstrate analytical skills using technology. |
| Teaching Methodologies | Lectures, Lab Work |
| CLO | CLO1 Identify various multimedia elements and the requirements of a multimedia project CLO2 Demonstrate appropriate design and social interaction with team members and society through the development of multimedia project CLO3 Demonstrate managerial skills in commercial-based interactive multimedia project |
| Pre-Requisite Courses | No course recommendations |
| Topics | |
| 1. INTRODUCTION TO MULTIMEDIA 1.1) Definition 1.2) Multimedia Terminologies 1.3) Multimedia Delivery Media 1.4) Usage of Multimedia | |
| 2. DEVELOPMENT OF MULTIMEDIA PROJECT 2.1) The Stages of a Project 2.2) Requirements for Project 2.3) The Team | |
| 3. TEXT 3.1) Importance of Text 3.2) Attributes of Text 3.3) Usage of Text In Multimedia 3.4) Hypertext and Hypermedia 3.5) Font Editing and Design Tools | |
| 4. GRAPHIC 4.1) Preparation for Creating Image 4.2) Making Still Images 4.3) 3D Drawing and Rendering 4.4) Colors 4.5) Image File Formats 4.6) Image Editing and Design Tools | |

5. SOUND

- 5.1) Introduction to Sound
- 5.2) Digital Audio and MIDI Audio
- 5.3) MIDI vs Digital Audio
- 5.4) Multimedia System Sounds
- 5.5) Audio File Formats
- 5.6) Adding Sound to Multimedia Project
- 5.7) Sound Editing Tools

6. VIDEO

- 6.1) Introduction to Video
- 6.2) How Video Works
- 6.3) Broadcast Video Standards
- 6.4) Analogue Video and Digital Video
- 6.5) Digital Video Containers
- 6.6) Shooting and Editing Video
- 6.7) Nonlinear Editing (NLE)

7. ANIMATION

- 7.1) Introduction to Animation
- 7.2) Principles of Animation
- 7.3) Animation by Computer
- 7.4) Animation File Formats
- 7.5) Animation Tools

8. HARDWARE

- 8.1) Macintosh versus Windows
- 8.2) Connections
- 8.3) Memory and Storage Devices
- 8.4) Input Devices
- 8.5) Output Devices

9. MULTIMEDIA AUTHORIZING TOOLS

- 9.1) Introduction to Multimedia Authoring Tools
- 9.2) Types of Authoring Tools
- 9.3) Features of Authoring Tools
- 9.4) Cross Platform Authoring Notes

10. THE INTERNET & MOBILE MULTIMEDIA

- 10.1) Internet History
- 10.2) Internetworking
- 10.3) Multimedia on Web
- 10.4) Mobile Multimedia
- 10.5) Mobile Hardware

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| Assessment Breakdown | % |
| Continuous Assessment | 100.00% |

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| Details of Continuous Assessment | Assessment Type | Assessment Description | % of Total Mark | CLO |
| | Group Project | Audio and Video Production | 10% | CLO2 |
| | Group Project | Interactive Multimedia Project using Authoring Tools | 30% | CLO2 |
| | Individual Project | Text and Image Designing | 10% | CLO3 |
| | Quiz | Quiz 1 | 5% | CLO1 |
| | Quiz | Quiz 2 | 5% | CLO1 |
| | Test | Test 1 | 20% | CLO1 |
| | Test | Test 2 | 20% | CLO1 |

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| Reading List | Recommended Text | <ul style="list-style-type: none"> Tay Vaughan 2014, <i>Multimedia: Making It Work, Ninth Edition</i>, 9 Ed., McGraw-Hill Education [ISBN: 9780071832885] |
| | Reference Book Resources | <ul style="list-style-type: none"> Ivan Vidal, Ignacio Soto, Albert Banchs, Jaime Garcia-Reinoso, Ivan Lozano, Gonzalo Camarillo 2019, <i>Multimedia Networking Technologies, Protocols, and Architectures</i>, Artech House [ISBN: 9781630813796] Creative Multimedia Team 2017, <i>Interactive Multimedia 'A Hands-On Approach'</i>, 1 Ed., Delima Ilmu Enterprise Malaysia [ISBN: 9789675748479] Ilpo Koskinen 2017, <i>Mobile Multimedia in Action</i>, Routledge [ISBN: 9781351504973] Gerald Friedland, Ramesh Jain 2014, <i>Multimedia Computing</i>, Cambridge University Press [ISBN: 9780521764513] |
| Article/Paper List | This Course does not have any article/paper resources | |
| Other References | This Course does not have any other resources | |