COURSE INFORMATION

Course Code	:	CSC253
Course Name	:	INTERACTIVE MULTIMEDIA
Course Level	:	4 - Diploma
Pre-Requisite Courses	:	No course recommendations
Teaching Period Duration	:	17 Weeks
Teaching Methodologies	:	Interactive Lecture Discussion Lab work Group work / Project based learning

Course Learning Outcomes

At the end of the course, students should be able to:

1. Display practical skills in using various multimedia elements for the requirements of a multimedia project (P3).

2. Demonstrate lifelong learning skills in the development of an interactive multimedia project using current multimedia software and tools (A3).

3. Formulate entrepreneurial skills in commercialization of the interactive multimedia project (A4).

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 and 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 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. Students also will be introduced to techniques and methods used for product commercialization through digital marketing or video pitching to enhance their entrepreneurial skills.

Continuous Assessment :

100.00%

Practical Test 1 - 30%
(CLO1)

Practical Test 2 - 30%
(CLO1)

Group Project - 20%
(CLO2)

Assignment - 20%
(CLO3)

Textbook : 1. Ze-Nian Li, Mark S. Drew, Jiangchuan Liu. (2021). *Fundamentals of Multimedia*, 3rd Edition, Springer Nature, ISBN: 9783030621230

References : 1. Florence Martin, Anthony Karl Betrus. (2021). *Digital Media for Learning: Theories, Processes, and Solutions*, 3rd Edition, Springer International Publishing, ISBN: 9783030331221.

2. Richard E. Mayer. (2022). *Multimedia Learning*, Cambridge University Press, ISBN: 9781316638088.

3. Sreeparna Banerjee. (2019). *Elements of Multimedia*, 1st Edition, Taylor & Francis Group, ISBN: 9781138360372

4. Ivan Vidal, Ignacio Soto, Albert Banchs, Jaime Garcia-Reinoso, Ivan Lozano, Gonzalo Camarillo. (2019). *Multimedia Networking Technologies, Protocols, and Architectures*, Artech House, ISBN: 9781630813796.

SCHEME OF WORK

Block SAM	Week	Topic	CLO/PLO	SLT/SPT	Methodology	Assessment	A.D.A.B model
1	**W1**	1. INTRODUCTION TO MULTIMEDIA • Definition • Multimedia Terminologies • Multimedia Delivery Media • Usage of Multimedia	CLO1	F2F = 4 (online) SPT= 4	Interactive Lecture, Lab work		**ANALYSIS Situate** **Code: B1, B4, B5**
	W2	2. MULTIMEDIA TOOLS ● Requirements for Multimedia Project ● Hardware ● Software	CLO1, CLO2	F2F = 4 (online) SPT= 4	Interactive Lecture, Discussion		**DESIGN Digest, Synthesize** **Code: B4, B6**
	W3	2. MULTIMEDIA TOOLS (cont.) ● Peopleware ● Connectivity ● The Stages of a multimedia Project	CLO1, CLO2	F2F = 4 (online) SPT= 4	Interactive Lecture, Discussion		**DESIGN Digest, Analyze** **Code: B4, B6, B7**
	W4	3. TEXT ● Importance of Text ● Attributes of Text ● Usage of Text in Multimedia ● Hypertext and Hypermedia ● Font Editing and Design Tools	CLO1, CLO2	F2F = 4 SPT= 4	Interactive Lecture, Lab work		**DESIGN Digest, Synthesize** **BUILD AND BELIEF Reflect** **Code: B4, B6**
	W5	4. GRAPHIC ● Preparation for Creating Image ● Making Still Images ● 3D Drawing and Rendering	CLO1, CLO2	F2F = 4 SPT= 4	Interactive Lecture, Lab work		**DESIGN Digest, Synthesis** **BUILD AND BELIEF Value and Extend** **Code: B4, B6**
	W6	4. GRAPHIC (cont.) ● Colors ● Image File Formats ● Image Editing and Design Tools ● Graphic Designing	CLO1, CLO2	F2F = 4 SPT= 7	Interactive Lecture, Discussion	**Practical Test 1 (30%)**	**DESIGN Digest,** **ASSESS Create. Connect** **Code: B4, B5, B6**
		Mid Semester Break (18 – 24 November 2024)					

2	**W7**	5. SOUND ● Introduction to Sound ● Digital Audio and MIDI Audio ● MIDI vs Digital Audio ● Multimedia System Sounds ● Audio File Formats ● Adding Sound to Multimedia Project ● Sound Editing Tools	CLO1, CLO2	F2F = 4 SPT= 4	Interactive Lecture, Lab work		**DESIGN** **Digest, Synthesize** **BUILD AND BELIEF** **Value and Extend** **Code: B4, B6**
	W8	6. VIDEO ● Introduction to Video ● How Video Works ● Broadcast Video Standards ● Analogue Video and Digital Video	CLO1, CLO2, CLO3	F2F = 4 SPT= 4	Interactive Lecture, Group work		**DESIGN** **Digest, Synthesis** **BUILD AND BELIEF** **Reflect** **Code: B6, B7**
	W9	6. VIDEO (cont.) ● Digital Video Containers ● Shooting and Editing Video ● Nonlinear Editing (NLE) ● Video production	CLO1, CLO2, CLO3	F2F = 4 SPT= 5	Interactive Lecture, Group work	**Video Pitching (20%)**	**DESIGN** **Digest** **ASSESS** **Create. Connect** **Code: B4, B5, B6**
	W10	7. ANIMATION ● Introduction to Animation ● Principles of Animation ● Animation by Computer ● Animation File Formats ● Animation Tools ● Animation production	CLO1, CLO2	F2F = 4 SPT= 5	Interactive Lecture, Lab work		**DESIGN** **Digest, Synthesize** **BUILD AND BELIEF** **Value and Extend** **Code: B4, B6**
Festival Break **(23 - 29 December 2024)**							
3	**W11**	8. MULTIMEDIA AUTHORING TOOLS ● Introduction to Multimedia Authoring Tools ● Types of Authoring Tools	CLO3	F2F = 4 SPT= 4	Interactive Lecture, Discussion	**Practical Test 2 (30%)**	**DESIGN** **Digest** **ASSESS** **Create. Connect** **Code: B4, B5, B6**

	W12	8. MULTIMEDIA AUTHORING TOOLS (cont.) ● Features of Authoring Tools ● Cross Platform Authoring Notes ● Developing multimedia project	CLO3	F2F = 4 SPT= 4	Interactive Lecture, Group work		**DESIGN** **Digest, Synthesize** **BUILD AND BELIEF** **Reflect, Value and Extend** **Code: B4, B6, B7**
	W13	9. THE INTERNET & MOBILE MULTIMEDIA ● Internet History ● Internetworking ● Multimedia on Web ● Mobile Multimedia ● Mobile Hardware	CLO3	F2F = 4 SPT= 7	Interactive Lecture, Discussion		**DESIGN** **Digest** **BUILD AND BELIEF** **Value and Extend** **Code: B2, B3, B8**
	W14	10. DIGITAL MARKETING ● Techniques and tools ● Marketing strategies through online platform and social media ● Digital marketing process	CLO3	F2F = 4 SPT= 4	Interactive Lecture, Group work	**Group Project (20%)**	**DESIGN** **Synthesize** **ASSESS** **Create. Connect** **Code: B5, B7, B8**
	Study Week **(27 January – 2 February 2025)**						
4	**Week 15**						
	Week 16						
	Week 17						

** Entrance survey : 7 October – 3 November 2024

** Exit survey : 6 January – 9 February 2025

** SUFO : 6 January – 9 February 2025

** Semester break : 24 February – 23 March 2025

JADUAL PANDUAN MODEL A.D.A.B (NILAI)

Kod Nilai	Penerangan / huraian
B1	**Nilai bertuhan** a. Tuhan sebagai sumber ilmu b. Keyakinan Tuhan Maha Berkuasa c. Keyakinan Tuhan Maha Bijaksana d. Keyakinan Tuhan Maha Pengasih Penyayang
B2	**Nilai beragama** a. Yakin agama menyuruh kebaikan b. Menyedari kepentingan beragama c. Mentaati suruhan agama d. Menghormati perbezaan kepercayaan agama
B3	**Nilai berbuat kebaikan** a. Mempunyai rasa peduli b. Mempunyai rasa empati c. Mempunyai kemanusiaan
B4	**Adab sebagai penuntut ilmu** a. Memahami kepentingan ilmu b. Menghormati ibubapa dan guru c. Menjaga adab dengan kawan-kawan d. Bersungguh-sungguh dalam menuntut ilmu
B5	**Hubungan dengan Tuhan** a. Mengiktiraf keagungan Tuhan b. Mensyukuri segala kurniaan Tuhan c. Menerima ketentuan Tuhan dengan sangka baik d. Mengingati Tuhan e. Meminta dan menyerah diri pada Tuhan
B6	**Hubungan dengan diri** a. Menghargai kelebihan dan bakat diri b. Menerima dan memperbaiki kekurangan diri c. Memiliki dan berusaha mencapai cita-cita / impian d. memelihara kesejahteraan diri dari sudut JERI (Jasmani, Emosi, Rohani, Intelek) e. menangani konflik dengan bijaksana
B7	**Hubungan dengan masyarakat** a. Menghormati dan bertoleransi kepelbagaian agama dan budaya b. Menyantuni dan tidak mudah menilai (judgemental) c. Menjaga keharmonian dalam masyarakat d. Peduli dan cakna dengan keperluan masyarakat e. Menjaga pemikiran, Bahasa dan perbuatan dalam hubungan dan pergaulan f. Menangani perubahan dalam masyarakat lokal dan globa
B8	**Hubungan dengan alam (alam natural dan alam buatan)** a. Menghargai alam b. Menjaga keseimbangan c. Mengelakkan pembaziran / kerosakkan d. Menjaga keselamatan e. Menghargai kebersihan dan persekitaran