THE MAHATMA GANDHI UNIVERSITY

UNDERGRADUATE PROGRAMMES (HONOURS)

SYLLABUS

MGU-UGP (Honours)

(2024 Admission Onwards)

Faculty: Fine Arts

Expert Committee: Animation and Graphic Design

Subject: Digital Media

Mahatma Gandhi University
Priyadarshini Hills
Kottayam – 686560, Kerala, India

Syllabus Index

Name of the Minor: **Digital Media**

Semester 1

Course Code	Title of the Course	Type of the Course DSC, MDC, SEC etc.	Credit	Hours/ week	Hour Distribution /week			
					L	T	P	O
MG1DSCDMD100	Exploring Raster Graphics	DSC B	4	5	0	3	2	0

Semester: 2

Course Code	Title of the Course	Type of the Course DSC, MDC, SEC etc.	Credit	Hours/ week	Hour Distribution /week			
					L	T	P	O
MG2DSCDMD100	Color Theory for Animation and VFX	DSC B	4	5	0	3	2	0

Semester: 3

Course Code	Title of the Course	Type of the Course DSC, MDC, SEC etc.	Credit	Hours/ week	Hour Distribution /week			
					L	T	P	O
MG3DSCDMD200	Art of Editing	DSC B	4	5	0	3	2	0

Semester: 4

Course Code	Title of the Course	Type of the Course DSC, MDC, SEC etc.	Credit	Hours/ week	Hour Distribution /week			
					L	T	P	O
MG4DSCDMD200	Art of Editing	DSC C	4	5	0	3	2	0

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Programme						
Course Name	EXPLORING RASTER GRAPHICS					
Type of Course	DSC B					
Course Code	MG1DSCDMD100					
Course Level	100-199					
Course Summary	This beginner-level course in raster graphics provides a comprehensive introduction to the essential concepts, tools, and techniques required for working with raster-based images.					
Semester	I	Credits			4	Total Hours
Course Details	Learning Approach	Lecture	Tutorial	Practical / Practicum	Others	
	Experiential, Constructivist and Cognitive learning approach	0	3	1	0	75
Prerequisites, if any	The course is designed for beginners, so no prior experience in graphic design or raster graphics is necessary.					

COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome **Upon completion of this course, students will be able to;**	Learning Domains*	PO No
1	Recall and define fundamental concepts related to raster graphics, including pixels, resolution, color modes, file formats and bit depth.	K	1
2	Summarize the differences between raster and vector graphics, demonstrating an understanding of their unique characteristics and applications.	U	1
3	Apply image editing techniques using raster graphics software, showcasing proficiency in essential image manipulation tools.	A	1
4	Evaluate the effectiveness of retouching and restoration techniques in improving the quality of images.	E	1, 2
5	Design practical projects, demonstrating the integration of learned concepts and techniques into real-world applications.	C	1, 2, 10

Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)

COURSE CONTENT

Content for Classroom transaction (Units)

Module	Units	Course description	Hrs	CO No.
1	**Introduction to Raster Graphics and Basic Concepts**			
	1.1	Definition of raster graphics. Comparison with vector graphics. Common applications of raster graphics. Understanding pixels and their role. Resolution and its impact on image quality.	5	1, 2
	1.2	Color Modes and Bit Depth - Explanation of RGB and CMYK color modes. Introduction to grayscale. Bit depth and its influence on color representation. Overview of common raster image formats (JPEG, PNG, GIF, TIFF).	5	1, 2
2	**Raster Graphics Software and Tools**			
	2.1	Overview of popular raster graphics software Understanding the user interface and basic features Basic image editing tools Understanding layers and their significance Introduction to basic image adjustments (brightness, contrast, saturation)	10	1, 2
	2.2	Selection and Masking Selection tools and techniques Masking for precise editing Layer masks and their applications	10	1, 2, 3
	2.3	Exploring filters for creative effects Applying special effects to enhance images Understanding the impact of filters on image quality	15	1, 2, 3, 5
3	**Techniques in Raster Graphics**			

	3.1	Adding and formatting text in raster graphics Incorporating typography into designs Creating text effects and stylized fonts Retouching imperfections in images Restoring old or damaged photographs Techniques for blemish removal and skin retouching	15	1, 2, 3, 4, 5
4	**Compositing Techniques**			
	4.1	Compositing and Collage Combining multiple images into a cohesive composition Layer blending modes and their effects Creating photo collages and digital art	15	1, 2, 3, 5
5	**Teacher Specific Content**			

Teaching and Learning Approach	**Classroom Procedure (Mode of transaction)** ● Integrate hands-on learning experiences and practical exercises throughout the course. Encourage students to actively apply concepts through guided projects, allowing them to reinforce their understanding of raster graphics tools and techniques. ● Guide students through the essential features and functionalities of raster graphics software, ensuring they are comfortable navigating and utilizing the tools. ● Offer flexibility in learning paths by providing a variety of resources such as video tutorials and written guides. Recognize that beginners may have diverse learning preferences, allowing them to choose the resources that best suit their needs.

Assessment Types

MODE OF ASSESSMENT

A. Continuous Comprehensive Assessment (CCA) - 30 Marks

CCA Components	Marks Distribution
Assignments	10
Examination x 2	10 x 2 = 20
Total	30

B. End Semester Evaluation (ESE) - 70 Marks

- Practical examination

ESE Components	Marks Distribution
Technical Skills	20
Creative Execution	20
Tool Usage and Accuracy	20
Time Management and Completeness	10
Total	70

Please refer the appendix for more details

References

1. Smith, John. *Raster Graphics 101: A Beginner's Guide.* Pixel Press, 2020.
2. Brown, Emily. *Digital Canvas: Understanding Raster Graphics.* ArtPress, 2018.
3. Garcia, Luisa. *Pixels and Colors: A Primer on Raster Graphics.* GraphicDesign Books, 2019.
4. Turner, Michael. *Mastering Raster: A Comprehensive Guide for Beginners.* DesignHub, 2021.

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Programme						
Course Name	COLOUR THEORY FOR ANIMATION AND VFX					
Type of Course	DSC B					
Course Code	MG2DSCDMD100					
Course Level	100-199					
Course Summary	This course outlines a progressive learning path for understanding and applying colour theory in animation and visual effects. Each module is designed for individuals interested in animation, visual effects, graphic design, illustration, and other creative fields where colour plays a crucial role.					
Semester	II	Credits			4	Total Hours
Course Details	Learning Approach	Lecture	Tutorial	Practical / Practicum	Others	
	Experiential, constructivist and cognitive learning approach	0	3	1	0	75
Prerequisites, if any	The key prerequisites are enthusiasm for learning about colour and a willingness to explore its creative potential in animation, design and VFX.					

COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome **Upon completion of this course, students will be able to;**	Learning Domains*	PO No
1	Recall and identify fundamental colour theory concepts, including primary, secondary, and tertiary colours, as well as the psychological effects of different colours in animation and VFX.	K	1, 2
2	Comprehend the principles of colour harmony, contrast, and temperature in the context of animation and visual effects.	U	1, 2, 4
3	Apply colour theory principles to create visually compelling and harmonious colour schemes for animated characters, scenes, and visual effects.	A	1, 2, 4
4	Analyze existing animations and VFX sequences to evaluate the effectiveness of colour choices in conveying narrative, mood, and atmosphere.	An	2, 3
5	Combine knowledge of colour theory with other elements of animation and VFX to synthesize creative and innovative visual solutions.	C	10
Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)			

COURSE CONTENT

Content for Classroom transaction (Units)

Module	Units	Course description	Hrs	CO No.
1	**Introduction to Colour**			
	1.1	**Colour Properties** Explore RGB, CMYK, and HSV, understanding their applications and interactions. The science of light and colour Colour perception and the human eye	5	1
	1.2	**Language of Colour** Terminology and vocabulary Introduction to the colour wheel - primary, secondary, tertiary colours Colour relationships - Monochromatic, analogous, complementary, split-complementary schemes	10	1
	1.3	**Colour Harmony and Contrast** Master different colour harmony schemes and explore contrast principles for visual impact. Interactive exercises - Experiment with colour mixing, palette creation, and basic colour applications.	10	2
2	**Colour Perception and Psychology**			
	2.1	**The Psychology of Colour** How colour affects emotions and associations. Colour Temperature - Warm and cool colours, their impact, and application.	10	3
	2.2	**Cultural and Historical Meanings of Colour** Colour meanings in different cultures, social, religious factors etc. Colour symbolism and storytelling. Creating mood and atmosphere through colour choices.	10	3
3	**Colour Design for Storytelling**			

	3.1	**Mood and Atmosphere** Learn how to use colour palettes to create specific moods and atmospheres in a scene. Design mood boards for different scenarios, showcasing how colour supports desired moods and stories.	15	4
	3.2	**Character Design and Colour Symbolism** Explore how colour choices define character personalities, emotions, and relationships, including cultural symbolism. Case studies and analysis - Analyze renowned animations and films, identifying design choices, narrative impact, and industry trends.	10	4
4	**Colour Portfolio Project**			
	4.1	**Understanding the Project Brief** Reviewing the provided project brief and identifying key objectives, and time constraints.	5	5
5	**Teacher Specific Content**			

Teaching and Learning Approach	**Classroom Procedure (Mode of transaction)** ● Workshops and screening - Cover the fundamentals of colour theory, including the colour wheel, primary, secondary, tertiary colours and discuss the basics of colour mixing and the psychological impact of different colours. ● Guest speaker - Invite a colourist, animator, or VFX artist to discuss advanced colour techniques and current industry trends. ● Hands-On class assignments - Assign a project on character colour design, background design and animation frame redesign. ● Field Trip - Organize a field trip to a museum or art gallery and have students analyze the use of colour in different artworks.

Assessment Types

MODE OF ASSESSMENT

A. Continuous Comprehensive Assessment (CCA) - 30 Marks

CCA Components	Marks Distribution
Assignments / Class test	10
Examinations x 2	10 x 2 = 20
Total	30

B. End Semester Evaluation (ESE) - 70 Marks

- Practical examination

ESE Components	Marks Distribution
Final Colour Artwork	50
Written Explanation and Analysis	20
Total	70

Please refer the appendix for more details

References

1. Edwards, Betty. colour by Betty Edwards: A Course in Mastering the Art of Mixing colours. Penguin USA, 2004.
2. Eiseman, Leatrice. *The Complete colour Harmony, Pantone Edition: Expert colour Information for Professional Results*. Rockport Publishers, 2017.
3. Gage, John. *colour and Meaning: Art, Science, and Symbolism*. University of California Press, 2000.
4. Elliot, Andrew J., Mark D. Fairchild, and Anna Franklin, editors. *Handbook of colour Psychology.* Cambridge Handbooks in Psychology, Cambridge University Press, 26 April 2018.
5. Bordwell, David, Kristin Thompson, and Jeff Smith. *Film Art: An Introduction*. McGraw-Hill College, 4 January 2016.

Suggested Readings

1. Colour Matters. "Colour Theory Basics." *Colour Matters*, www.colourmatters.com/colour-and-design/colour-theory.
1. https://www.baianat.com/articles/the-power-of-colour-in-animation

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Programme						
Course Name	ART OF EDITING					
Type of Course	DSC B					
Course Code	MG3DSCDMD200					
Course Level	200-299					
Course Summary	Video Editing Essentials provides a comprehensive overview of video editing essentials, covering both the foundational concepts and advanced techniques while also addressing project workflow, collaboration, and specialized editing skills. The hands-on approach and practical exercises ensure that students gain proficiency in video editing software and develop a strong foundation for pursuing a career in the field.					
Semester	III	Credits			4	Total Hours
Course Details	Learning Approach	Lecture	Tutorial	Practical / Practicum	Others	
	Experiential, Constructivist and Cognitive learning approach	0	3	1	0	75
Prerequisites, if any	A proficiency in using a computer, including file management and navigation. The ability to think creatively and critically about visual storytelling. Having a basic understanding of these prerequisites will help learners make the most of the Video Editing Essentials course. Additionally, these prerequisites ensure that students enter the course with the foundational knowledge needed to grasp the concepts and skills covered throughout the syllabus.					

COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome Upon completion of this course, students will be able to;	Learning Domains*	PO No
1	Identify and recall key terminology, principles, and techniques associated with video editing.	K	1, 2
2	Explain the fundamental concepts of video editing, including the editing workflow and the role of different editing styles in storytelling.	U	1, 2, 10
3	Apply video editing techniques using industry-standard software to create cohesive and visually engaging sequences.	A	1, 2, 7
4	Analyze and deconstruct edited sequences to understand the creative and technical choices made by editors.	An	2, 3, 7
5	Synthesize acquired knowledge and skills to independently edit video content with a strong emphasis on storytelling.	C	1, 2, 10

Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)

COURSE CONTENT

Content for Classroom transaction (Units)

Module	Units	Course description	Hrs	CO No.
1	**Introduction to Video Editing**			
	1.1	**Overview of video editing** History, definition, purpose, and importance Introduction to common video editing software	5	1, 2
	1.2	**Understanding the basic elements of video editing** Clips, timelines, tracks, transitions, and effects Importing and organizing media assets: videos, images, audio files	5	1, 2
2	**Basic Editing Techniques**			
	2.1	**Understanding the editing workflow** Raw footage to final output Basic editing tools and functions - cutting, trimming, splitting, and merging clips Working with the timeline - arranging clips, adjusting clip duration, and creating sequences	15	2, 3, 4
	2.2	**Adding and adjusting audio** Adjusting volume levels, applying fades, and using keyframes Noise reduction, equalization, and audio enhancements Hands-on exercises - Editing practice with provided footage, creating simple sequences with audio synchronization	15	2, 3, 5
3	Advanced Editing Techniques			
	3.1	**Transitions and Effects** In-depth exploration of transitions and their applications Transitions, overlays, and effects Understanding the impact of different types of transitions on pacing and storytelling	5	3, 4

	3.2	**Understanding color correction and grading** Introduction to color correction and color grading Enhancing the visual appeal of the video through color adjustments. Adjusting exposure, contrast, saturation, and white balance	5	3, 4
	3.3	**Utilizing motion graphics and titles** Creating and animating text and graphics within the editing software Introduction to compositing - Green screen (chroma key) techniques and layer blending modes within the editing software Hands-on exercises - Applying advanced editing techniques to enhance and stylize video projects	5	3, 4, 5
4	Project Management and Exporting			
	4.1	**Organizing projects** Using bins, labels, and markers for efficient workflow management Collaborative editing, Sharing projects, working with multiple editors, and version control	10	3
	4.2	**Exporting and rendering** Understanding video formats, resolutions, and codecs Exporting videos for web, social media, and mobile devices Hands-on exercises - Finalizing and exporting video projects, preparing them for distribution and sharing	10	3, 5
5	**Teacher Specific Content**			

Teaching and Learning Approach	**Classroom Procedure (Mode of transaction)** ● Demonstration: Scheduled sessions where instructors discuss the importance of editing. ● Hands-On Workshops: In-person or virtual workshops with practical exercises. ● Online Tutorials: Online video tutorials, resources, and self-paced assignments. ● Guests: Inviting industry professionals for workshops, Q&A sessions, and sharing real-world experiences.

Assessment Types

MODE OF ASSESSMENT

A. Continuous Comprehensive Assessment (CCA) - 30 Marks

CCA Components	Marks Distribution
Assignments / Class Tests	10
Examination x 2	20
Total	30

B. End Semester Evaluation (ESE) - 70 Marks

- Practical examination

ESE Components	Marks Distribution
Technical Skill	20
Artistic Application	20
Final Editing Works	30
Total	70

Please refer the appendix for more details

References

1. Murch, Walter. *In the Blink of an Eye: A Perspective on Film Editing*. Silman-James Press, 2001.
2. Reisz, Karel, and Gavin Millar. *The Technique of Film Editing*. Focal Press, 2012.
3. Ascher, Steven, and Edward Pincus. *The Filmmaker's Handbook: A Comprehensive Guide for the Digital Age*. Plume, 2012.

Jago, Maxim. *Adobe Premiere Pro CC Classroom in a Book*. Adobe Press, 2019.

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Programme						
Course Name	ART OF EDITING					
Type of Course	DSC C					
Course Code	MG4DSCDMD200					
Course Level	200-299					
Course Summary	Video Editing Essentials provides a comprehensive overview of video editing essentials, covering both the foundational concepts and advanced techniques while also addressing project workflow, collaboration, and specialized editing skills. The hands-on approach and practical exercises ensure that students gain proficiency in video editing software and develop a strong foundation for pursuing a career in the field.					
Semester	IV	Credits			4	Total Hours
Course Details	Learning Approach	Lecture	Tutorial	Practical / Practicum	Others	
	Experiential, Constructivist and Cognitive learning approach	0	3	1	0	75
Prerequisites, if any	A proficiency in using a computer, including file management and navigation. The ability to think creatively and critically about visual storytelling. Having a basic understanding of these prerequisites will help learners make the most of the Video Editing Essentials course. Additionally, these prerequisites ensure that students enter the course with the foundational knowledge needed to grasp the concepts and skills covered throughout the syllabus.					

COURSE OUTCOMES (CO)

CO No.	Expected Course Outcome Upon completion of this course, students will be able to;	Learning Domains*	PO No
1	Identify and recall key terminology, principles, and techniques associated with video editing.	K	1, 2
2	Explain the fundamental concepts of video editing, including the editing workflow and the role of different editing styles in storytelling.	U	1, 2, 10
3	Apply video editing techniques using industry-standard software to create cohesive and visually engaging sequences.	A	1, 2, 7
4	Analyze and deconstruct edited sequences to understand the creative and technical choices made by editors.	An	2, 3, 7
5	Synthesize acquired knowledge and skills to independently edit video content with a strong emphasis on storytelling.	C	1, 2, 10

Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S), Interest (I) and Appreciation (Ap)

COURSE CONTENT

Content for Classroom transaction (Units)

Module	Units	Course description	Hrs	CO No.
1	**Introduction to Video Editing**			
	1.1	**Overview of video editing** History, definition, purpose, and importance Introduction to common video editing software	5	1, 2
	1.2	**Understanding the basic elements of video editing** Clips, timelines, tracks, transitions, and effects Importing and organizing media assets: videos, images, audio files	5	1, 2
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	2.1	**Understanding the editing workflow** Raw footage to final output Basic editing tools and functions - cutting, trimming, splitting, and merging clips Working with the timeline - arranging clips, adjusting clip duration, and creating sequences	15	2, 3, 4
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	3.2	**Understanding color correction and grading** Introduction to color correction and color grading Enhancing the visual appeal of the video through color adjustments. Adjusting exposure, contrast, saturation, and white balance	5	3, 4
	3.3	**Utilizing motion graphics and titles** Creating and animating text and graphics within the editing software Introduction to compositing - Green screen (chroma key) techniques and layer blending modes within the editing software Hands-on exercises - Applying advanced editing techniques to enhance and stylize video projects	5	3, 4, 5
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Assessment Types

MODE OF ASSESSMENT

A. Continuous Comprehensive Assessment (CCA) - 30 Marks

CCA Components	Marks Distribution
Assignments / Class Tests	10
Examination x 2	20
Total	30

B. End Semester Evaluation (ESE) - 70 Marks

- Practical examination

ESE Components	Marks Distribution
Technical Skill	20
Artistic Application	20
Final Editing Works	30
Total	70

Please refer the appendix for more details

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1. Murch, Walter. *In the Blink of an Eye: A Perspective on Film Editing*. Silman-James Press, 2001.
2. Reisz, Karel, and Gavin Millar. *The Technique of Film Editing*. Focal Press, 2012.
3. Ascher, Steven, and Edward Pincus. *The Filmmaker's Handbook: A Comprehensive Guide for the Digital Age*. Plume, 2012.

Jago, Maxim. *Adobe Premiere Pro CC Classroom in a Book*. Adobe Press, 2019.