

**Maulana Abul Kalam Azad University of Technology, WB**  
**(Formerly known as West Bengal University of Technology)**  
**Syllabus of B.Sc. in Multimedia Animation & Graphics**  
**Effective from academic session 2023-24**

**Subject Code: BMAGD 301,391**

**Subject Name: Animation Fundamentals**

**Course Objective:**

This course aims to equip students with essential knowledge and principles of animation. Participants will gain a solid understanding of key concepts of animation. Through hands-on projects, students will apply these fundamentals, building a foundation for dynamic storytelling and creative expression in the field of animation. By the course's conclusion, students will possess the knowledge and practical skills needed to produce engaging animations across various platforms, setting the stage for further specialization within the discipline.

<b>Sl</b>	<b>Course Outcome(CO)</b>
1	Understand the history of animation
2	Understand the animation process, forms and style
3	Organize and Compare different types of animation, composition and different stage of animation.
4	Apply and assess tool & techniques for animation.
5	Apply and assess different medium and methods of animation.
6	Analyze, evaluate and construct the animation process and social delivery.

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**BMAGD(T) 301 (3L)**

<b>CO</b>	<b>Blooms Level ( if applicable )</b>	<b>Modules</b>	<b>Percentage of questions</b>
CO1	1,2	M1,M2,M3	25
CO2	1,2	M2,M3	15
CO3	2,3	M3,M5	15
CO4	3,4,5	M4	15
CO5	3,4,5	M5	15
CO6	4,5,6	M1,M2,M3	15
			<b>100</b>
			<b>100</b>

**Module 1 - History Of Animation**

1. Exploration of the work of early animation pioneers and the development of animation techniques in the late 19th and early 20th centuries.
2. Analysis of the rise of major animation studios, including Disney, Warner Bros., and MGM.
3. Study of different animation traditions and styles from around the world.
4. Exploration of how animation has been used as a medium for artistic expression and innovation.
5. Exploration of the influence of television on animation storytelling and production.
6. Overview of the shift from traditional to digital animation techniques and Examination of the impact of computer software and digital tools on the animation production process
7. Evolution of Animation Industry in India

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**Module 2 - Introduction to animation process**

1. Understanding the term 'Production Pipeline' and its function in the industry.
2. Roles and responsibilities of different team members in the animation industry.
3. Storyboarding ,Concept Art, Character Design and Development
4. Evolution and technological advancements in animation and Different forms of animation
5. Overview of popular animation software (e.g., Adobe Animate, Autodesk Maya etc. )
6. Case Studies and Keeping up with current trends and innovations in the animation industry.

**Module 3 – Animation In Different Forms**

1. Students will explore the dynamic medium of animation while finding their personal style and visual and poetic vision.
2. Application of animation in other industries like education, healthcare etc.
3. Incorporation of animation in documentary filmmaking and Techniques for integrating animation with live-action footage.
4. Overview and understanding the various forms of animation, including the following :
  - a) Traditional 2D Animation
  - b) Digital 2D Animation
  - c) 3D Computer Animation
  - d) Stop-Motion Animation
  - e) Cut-out Animation
  - f) Claymation

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**Module 4 – Tools And Techniques For Animation**

1. Processes from Traditional Animation to Digital Era.
2. Understanding the differences between 2D and 3D animation software.
3. Understanding digital tools and Techniques for creating digital art and animations
4. Principles of Animation and their application with different tool & technique.

**Module 5 – Animation Principles**

1. Introduction to the 12 basic principles of animation.
2. Definition and importance of animation principles in creating believable and engaging animations..
3. The basic concepts of timing, spacing, weight, squash-and-stretch, overlapping action, hook-ups, arcs etc.
4. Analyzing animations that demonstrate the effective application of animation principles.

**Module 6 – Design Studio**

1. Studying animation films originating from various backgrounds incorporating different styles and techniques.
2. Analyzing the different techniques and tools used to create animation films.

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**BMAGD 391 (2P)**

<b>CO</b>	<b>Blooms Level ( if applicable )</b>	<b>Modules</b>	<b>Percentage of questions</b>
CO3	2,3	M3,M4	20
CO4	3,4,5	M3,M4,M5	20
CO5	3,4,5	M4,M5	20
CO6	4,5,6	M3,M4,M5,M6	40

**Module 1 - Introduction to animation process**

1. Students will the basic concepts of construction, line of action, perspective.
2. Developing good drawing skills and personal style.
3. Understanding the interface and basic functionalities of animation tools
4. Character model sheets, animal anatomy and live models will be drawn.

**Module 2 - Animation In Different Forms**

1. In-depth exploration of popular animation software and comparative analysis of their features.
2. Understanding the process of hand drawn animation from light box to scanner

**Module 3 - Tools And Techniques For Animation**

1. In-depth exploration of popular animation software and comparative analysis of their features.
2. Understanding the industry standard softwares and best practices.
3. Strategies for optimizing animation workflows.
4. Time-saving tips and tricks for efficient animation production.

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**Module 4 - Animation Principles**

1. Understanding the concept of keys and poses in animation.
2. Hands-on exercises for students with basic animation exercises
3. Incorporating the principles of animation in various exercises to create looping animations

**Module 5 – Design Studio**

1. Execution and culmination of the knowledge gathered from all the other modules of the semester into a design project.
2. Creating of product packshot and commercial videos at industry standard levels.

**Suggested Readings:**

1. A Reader in Animation Studies by Jayne Pilling.
2. The Animation Book: A Complete Guide to Animated Filmmaking from Flip - books by Kit Laybourne.
3. Enchanted Drawings: The History of Animation- Charles Solomon
4. Animation Art- Beck, Jeny ed.
5. Timing for animation- Whitaker, Marold and Malab, John
6. Character Animation Fundamentals: Developing Skills for 2D and 3D Chateve Roberts  
Character Animation by Steve Roberts
7. Animation Background layout by Mike S Fowler. Fowler Cartooning Ink Publishing
8. Making Comics: Storytelling secrets of comics, Manga and Graphic Novel

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**Subject Code: BMAGD 302, 392**

**Subject Name: 2D Animation Production**

**Course Objective:**

This course aims to equip students with essential skills in 2D Animation Production. Foster proficiency in industry-standard tools, enabling students to create their own 2D animated projects. Develop critical thinking and practical skills, preparing undergraduates for potential careers or advanced studies in the dynamic field of 2D animation.

<b>Sl</b>	<b>Course Outcome(CO)</b>
1	Understand the Fundamentals, and process of 2d animation production.
2	Explain the methods and principal to develop an in-depth understanding of processes to help create better 2d animation.
3	Apply tools and techniques to create Traditional and digital 2d animation.
4	Understand the culture and practice of 2D animation and its industry.
5	Understand the process of Post production for 2d animation
6	Organize the need for and have the preparation and ability to engage in independent and life-long learning in the 2D animation process and social delivery

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**Theory-BMAGD(T) 302 (3L)**

<b>CO</b>	<b>Blooms Level (if applicable)</b>	<b>Modules</b>	<b>Percentage of questions</b>
CO1	1,2	M1,M2	40
CO3	2,3	M4,M5	60
			<b>100</b>

**Module 1 – History and evolution of 2d animation Production**

1. Overview of the history and theory of animation including the origin of animation forms.
2. Exploration of early animation devices and technique and Influence of art movements on early 2D animation.
3. Rise of major animation studios.
4. Iconic characters and milestones and technological advancements and innovations during this period
5. Transition from hand-drawn to digital animation and introduction to animation tools used throughout history

**Module 2 – Methods and Process of 2D animation**

1. Overview of the animation production pipeline
2. Introduction to 2D Animation and Introduction to industry-standard software.
3. Understanding key principles and terminology
4. Principles of character design, anatomy, expressions, and movement.
5. Understanding the importance of frame-by-frame animation.
6. Learning to create visual consistency between characters and backgrounds.



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**Module 3 – 2D animation Industry**

1. A brief introduction of world animation and its industry.
2. The traditional process followed at major studios like Walt Disney, Studio Glibly etc.
3. Development of animation industry in India.
4. Introduction to key players, studios, and notable works in the field.
5. Exploration of the current state and trends in the 2D animation industry.

**Module 4 – Post production process of 2D animation**

1. Overview of the animation production pipeline and importance and role of post-production
2. Importance of sound in animation and creating and incorporating sound effects
3. Understanding color correction in animation
4. Introduction to special effects in 2D animation
5. Exporting and rendering considerations

**Module 5 – Tools and Techniques for digital animation**

1. Overview of digital animation, its applications, introduction to key terminology and concepts
2. Understanding the new age tools and techniques for Digital animation
3. Provide an in depth idea of digital technique for modern day animation
4. Exploration of advanced animation techniques (e.g., frame-by-frame animation, particle effects)
5. Review of key concepts and techniques learned throughout the course

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**BMAGD 392 (2P)**

<b>CO</b>	<b>Blooms Level (if applicable)</b>	<b>Modules</b>	<b>Percentage of questions</b>
CO1	2,3,4	M2	15
CO2	2,3,4	M2	15
CO3	2,3,4	M3	15
CO4	2,3,4	M3	15
CO5	2,3,4	M5	15
CO6	2,3,4	M6	25
			<b>100</b>

**Module 1 – Methods and Process of 2D animation**

1. Exploration of key animation principles (e.g., timing, squash and stretch) and Hands-on exercises to apply animation techniques.
2. Using different methods like, Cut out animation, sand animation, Cell animation
3. Hands-on projects incorporating background elements.

**Module 2 – 2D animation Industry**

1. In-depth exploration of software commonly used in the 2D animation industry.
2. Guidance on project planning, execution, problem-solving, workflow optimization and project organization.

**Module 3 – Post production process of 2D animation**

1. Introduction to post-production software and tools.
2. Foley techniques for enhancing animation.
3. Enhancing visual appeal through color grading and practical exercises using color correction tools.
4. Compositing techniques for combining different elements.
5. Adapting animations for different platforms and Quality control

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**Module 4 – Tools and Techniques for digital animation**

1. Producing quality animation using digital tools within given deadlines
2. Hands-on training in industry standard software navigation and functionalities
3. Students will engage in practical exercises, collaborative projects, and receive constructive feedback to reinforce their understanding of digital animation tools and techniques

**Module 5 – Animation Studio**

1. Strategizing, layout and hands-on process of 2D animation film making
2. Execution and culmination of the knowledge gathered from all the other modules of the semester into animation project

**Suggested Readings :**

1. Multimedia and Animation – V. K. Jain, Khanna Publishing House (AICTE Recommended Textbook)
2. Animation art - Beck, Jeny ed.
3. Timing for animation - Whitaker, Marold and malab, John
4. Character Animation Fundamentals: Developing Skills for 2D and 3D Character Animation by Steve Roberts
5. Animation background layout by Mike S Fowler. Fowler Cartooning Ink Publishing
6. Making Comics: Storytelling secrets of comics, Manga and Graphic Novels
7. Animated Storytelling: Simple Steps For Creating Animation and Motion Graphics 1st edition by Liz Blazer

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**Semester-IV**

**Subject Code : BMAGD 401, 491**

**Subject Name: Audio and Video Editing for Cinema (3L + 2P)**

**Course Objective:**

The Advanced **Audio and Video Editing for Cinema** is to equip students with the essential skills and knowledge necessary to proficiently edit audio and video content specifically tailored for the cinematic medium. Participants will gain a comprehensive understanding of the technical aspects, creative considerations, and industry-standard tools involved in the editing process, enabling them to effectively contribute to the storytelling and visual aesthetics of cinematic productions. By the end of the course, students will have developed a refined skill set in audio and video editing, allowing them to bring a professional and polished touch to cinematic projects in various genres.

<b>Sl</b>	<b>Course Outcome</b>
1	Acquire the ability to edit audio and video content with precision, emphasizing the unique requirements of cinematic storytelling.
2	Develop a comprehensive understanding of the tools and software commonly used in the film industry for audio and video editing, ensuring competence in professional editing environments.
3	Enhance creative storytelling capabilities through the manipulation of audio and video elements, contributing to the overall narrative and emotional impact of cinematic productions.
4	Gain a solid foundation in the technical aspects of audio and video editing, including but not limited to synchronization, color grading, sound design, and visual effects, to meet industry standards.
5	Foster effective communication and collaboration skills essential for working within a film making team, understanding the collaborative nature of the post-production process.
6	Build a portfolio showcasing diverse editing projects, demonstrating a range of skills and the ability to adapt to different cinematic styles, genres, and storytelling requirements.

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**BMAGD(T) 401 (3L)**

<b>co</b>	<b>Blooms Level</b>	<b>Modules</b>	<b>%age of questions</b>
CO1	1,2	M1,M2	40
CO3	2,3	M4,M5	60
			<b>100</b>

**Module 1 - Introduction to Cinematic Editing**

1. Explore the evolution of cinematic editing from the silent era to contemporary times.
2. Understand the impact of key editing techniques and pioneers in shaping the language of cinema.
3. Analyze the crucial role of editing in shaping narrative structure and influencing audience perception.
4. Examine how editing choices contribute to the overall emotional and thematic impact of a film.

**Module 2 - Essential Editing Tools and Software**

1. Delve into the features and capabilities of widely used editing software such as Adobe Premiere Pro, Final Cut Pro, or Avid Media Composer.
2. Understand the importance of selecting the right tool for the specific requirements of a cinematic project.
3. Explore advanced functionalities within editing software, including color grading, motion graphics, and special effects.
4. Discuss how these advanced features contribute to the overall visual and auditory impact of a film.

**Module 3 - Technical Aspects of Cinematic Editing**

1. Explore the technical fundamentals of cinematic editing, including frame rates, resolution,

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and aspect ratios.

2. Discuss how technical choices impact the visual aesthetics and storytelling of a film.
3. Examine the importance of synchronization in audio and video editing.
4. Discuss pacing strategies to create dynamic and engaging cinematic experiences.

#### **Module 4 - Creative Storytelling through Editing**

1. Investigate various creative editing techniques used in cinematic storytelling, such as jump cuts, match cuts, and cross-cutting.
2. Discuss how these techniques contribute to the narrative flow, mood, and emotional impact of a film.
3. Examine how editing styles vary across different cinematic genres (e.g., drama, action, comedy) and their impact on audience engagement.
4. Discuss case studies to understand the creative choices made by editors in iconic films.

#### **Module 5 - Sound Design and Editing.**

1. Explore the critical role of sound in cinematic storytelling, emphasizing its impact on atmosphere, emotion, and audience engagement.
2. Discuss how sound design and editing contribute to creating a immersive and impactful cinematic experience.
3. Examine sound editing techniques, including dialogue editing, Foley, and sound effects, and their role in enhancing storytelling.
4. Discuss the integration of music and ambient sound to create a cohesive and emotionally resonant audio experience.

#### **Module 6 - Collaboration and Teamwork in Post-Production**

1. Explore the collaborative aspects of post-production, emphasizing the interdependence of various roles within the filmmaking team.
2. Discuss the importance of effective communication, coordination, and collaboration in

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achieving a cohesive final product.

3. Examine the specific role of the editor within the post-production team, including interactions with directors, producers, sound designers, and other key collaborators.
4. Discuss the impact of effective collaboration on the overall quality and success of a cinematic project.

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**BMAGD 491 (2P)**

<b>co</b>	<b>Blooms Level</b>	<b>Modules</b>	<b>%age of questions</b>
CO1	2,3,4	M2	15
CO2	2,3,4	M2	15
CO3	2,3,4	M3	15
CO4	2,3,4	M3	15
CO5	2,3,4	M5	15
CO6	2,3,4	M6	25
			<b>100</b>

**Module 1 - Basic Editing Software Navigation**

1. Hands-on experience with fundamental editing software tools.
2. Practice importing, cutting, and arranging footage to develop a foundational understanding of the editing process.
3. Engage in exercises focusing on assembling and disassembling sequences to comprehend the impact of editing decisions on the flow and coherence of a scene.
4. Apply basic editing techniques to create sequences that convey specific emotions or messages.

**Module 2 - Hands-On Editing Software Workshops**

1. Conduct practical workshops allowing students to navigate, experiment, and become proficient in using essential editing software.
2. Assign exercises that involve applying basic editing techniques and exploring advanced features.
3. Engage students in real-world editing scenarios, simulating challenges they might encounter in professional settings.
4. Encourage the application of learned tools and techniques in the creation of edited sequences for different cinematic styles.



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**Module 3 - Hands-On Editing Exercises for Technical Mastery**

1. Conduct practical exercises focused on mastering technical elements, such as adjusting frame rates and resolution.
2. Guide students in applying synchronization techniques and experimenting with pacing in editing sequences.
3. Present students with real-world editing challenges that require a sound understanding of technical aspects.
4. Encourage problem-solving skills by having students address issues related to frame rates, resolution, and synchronization in their editing projects.

**Module 4 - Editing Exercises for Creative Storytelling**

1. Assign hands-on exercises that challenge students to employ creative editing techniques to enhance storytelling.
2. Encourage experimentation with pacing, rhythm, and sequencing to achieve specific narrative effects.
3. Guide students in working on a project that requires them to apply genre-specific editing techniques.
4. Emphasize the importance of adapting creative storytelling approaches to match the tone and style of different genres.

**Module 5 - Hands-On Sound Editing Workshops (Practical)**

1. Conduct practical workshops guiding students through the process of sound editing using industry-standard tools.
2. Assign exercises that focus on syncing sound elements with visuals, creating soundscapes, and enhancing storytelling through sound.
3. Engage students in a comprehensive sound design project where they apply learned techniques to enhance the audio aspect of a cinematic scene.
4. Emphasize the synchronization of sound with visual elements to create a seamless and impactful audio-visual experience.

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**Module 6 - Simulated Filmmaking Team Exercises**

1. Engage students in simulated filmmaking team exercises, replicating real-world scenarios in post-production collaboration.
2. Assign tasks that require coordination and communication among editors, directors, and other team members to achieve a unified vision.
3. Encourage students to collaborate on a comprehensive editing project, with each participant responsible for specific aspects.
4. Implement a peer-review process, fostering constructive feedback and communication skills among team members.

**Suggested Readings :**

1. "In the Blink of an Eye: A Perspective on Film Editing" by Walter Murch
2. "The Technique of Film and Video Editing: History, Theory, and Practice" by Ken Dancyger
3. "In the Cut: A Practical Guide to Film Editing" by Gael Chandler
4. "The Conversations: Walter Murch and the Art of Editing Film" by Michael Ondaatje
5. "Cinematic Storytelling: The 100 Most Powerful Film Conventions Every Filmmaker Must Know" by Jennifer Van Sijll
6. "The Filmmaker's Handbook: A Comprehensive Guide for the Digital Age" by Steven Ascher and Edward Pincus
7. "Audio Video Systems" by Bali & Bali, Khanna Publishing House (AICTE Recommended Textbook).

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**Subject Code: BMAGD 402, 492**

**Subject Name: Introduction to 3D Animation Production (3L + 2P)**

**Course Objective:**

The "**Introduction to 3D Animation Production**" is to provide students with a foundational understanding of the principles, techniques, and processes involved in 3D animation. Through theoretical instruction and practical application, the course aims to equip students with the essential knowledge and skills necessary to create compelling and visually engaging 3D animations. By the end of the course, participants should have a solid grasp of the key concepts in 3D animation production, enabling them to embark on more advanced studies or pursue entry-level positions in the field.

<b>SI</b>	<b>Course Outcome</b>
1	Develop a comprehensive understanding of the principles, techniques, and workflows essential for 3D animation production.
2	Attain proficiency in using industry-standard 3D animation software, gaining the ability to navigate tools and execute fundamental animation tasks.
3	Foster creative expression through the application of animation principles, allowing students to bring their ideas to life in a three-dimensional digital space.
4	Acquire technical skills related to modeling, rigging, texturing, lighting, and rendering, providing a well-rounded foundation for 3D animation creation.
5	Cultivate effective collaboration and communication skills necessary for teamwork within a 3D animation production environment, understanding the interdisciplinary nature of the field.
6	Build a portfolio showcasing diverse 3D animation projects, demonstrating a range of skills and the ability to apply learned concepts to create visually compelling animations.

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**BMAGD(T) 402 (3L)**

co	Blooms Level	Modules	%age of questions
CO1	1,2	M1,M2	40
CO3	2,3	M4,M5	60
			<b>100</b>

**Module 1 - Introduction to 3D Animation**

1. Explore the foundational principles of 3D animation, including key concepts such as modeling, rigging, animation curves, and rendering.
2. Discuss the theoretical framework of how these elements come together to create dynamic and visually appealing animations.
3. Examine the historical progression of 3D animation in various forms of media, from early computer-generated imagery (CGI) in films to contemporary applications in video games and virtual reality.
4. Discuss the impact of technological advancements on the evolution and accessibility of 3D animation.

**Module 2 - 3D Modeling Techniques**

1. Explore the fundamental principles of 3D modeling, including polygonal modeling, NURBS (Non-Uniform Rational B-Splines), and sculpting techniques.
2. Discuss the theoretical aspects of creating three-dimensional digital representations of objects, characters, and environments.
3. Examine the theory behind applying textures and materials to 3D models to enhance realism and visual appeal.
4. Discuss UV mapping, material properties, and the role of textures in creating surface details for various 3D assets.

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**Module 3 - Rigging and Character Animation**

1. Explore the theoretical foundations of rigging in 3D animation, covering the creation of skeletal structures, joint hierarchies, and the application of constraints.
2. Discuss the importance of rigging in facilitating character movement and deformation for animation purposes.
3. Examine theoretical principles governing character animation, including keyframing, poses, and the principles of motion such as squash and stretch.
4. Discuss the role of anticipation, follow-through, and secondary motion in creating lifelike and expressive character animations.

**Module 4 - Texturing and Shading**

1. Explore the theoretical aspects of texturing in 3D animation, covering concepts such as UV mapping, texture coordinates, and the use of various types of textures
2. Discuss how textures contribute to the visual richness and realism of 3D models by defining surface details and characteristics.
3. Examine the theoretical principles of shading, including the interaction of light with surfaces, shading models, and material properties.
4. Discuss how shading techniques influence the perception of materials, such as metals, plastics, and fabrics, contributing to the overall visual aesthetics of 3D scenes.

**Module 5 - Lighting and Rendering**

1. Explore the theoretical foundations of lighting in 3D animation, covering concepts such as types of lights, shadows, and the impact of light on surfaces.
2. Discuss the role of lighting in creating mood, emphasizing focal points, and enhancing the overall visual appeal of 3D scenes.
3. Examine theoretical principles of rendering, including ray tracing, global illumination, and the rendering pipeline.
4. Discuss the importance of rendering settings, resolution, and output formats in achieving high-quality final images or animations.

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**Module 6 - Collaboration in 3D Animation Production**

1. Explore the theoretical aspects of collaboration within the context of 3D animation production, emphasizing the interdisciplinary nature of the field.
2. Discuss the roles of various team members, including modelers, animators, riggers, texture artists, and how their collaborative efforts contribute to the success of a project.
3. Examine theoretical principles of effective communication and project management in 3D animation production.
4. Discuss the importance of clear communication, task allocation, and project timelines to ensure smooth collaboration and successful project delivery.

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**BMAGD 492 (2P)**

<b>co</b>	<b>Blooms Level</b>	<b>Modules</b>	<b>%age of questions</b>
CO1	2,3,4	M2	15
CO2	2,3,4	M2	15
CO3	2,3,4	M3	15
CO4	2,3,4	M3	15
CO5	2,3,4	M5	15
CO6	2,3,4	M6	25
			<b>100</b>

**Module 1 - Hands-On Introduction to 3D Animation Software**

1. Conduct practical sessions introducing students to industry-standard 3D animation software such as Autodesk Maya, Blender, or Cinema 4D.
2. Guide students through basic software navigation and the creation of simple 3D objects.
3. Assign exercises that focus on fundamental animation techniques, including keyframing, easing, and timing.
4. Provide opportunities for students to apply theoretical concepts by animating simple objects and characters to understand the principles of movement.

**Module 2 - Hands-On 3D Modeling Software Workshops**

1. Conduct practical workshops to familiarize students with industry-standard 3D modeling software such as Autodesk Maya, Blender, or ZBrush.
2. Guide students through basic modeling tools and techniques, allowing them to create simple 3D objects.
3. Assign projects that progressively challenge students to apply 3D modeling techniques to create more complex objects, characters, or environments.
4. Encourage hands-on practice in refining and detailing models, incorporating textures and materials to achieve desired visual outcomes.

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**Module 3 - Hands-On Rigging Workshops**

1. Conduct practical workshops guiding students through the process of creating rigs for characters using industry-standard 3D animation software.
2. Provide hands-on experience in setting up rigging systems, defining controls, and testing deformations.
3. Assign projects that challenge students to apply rigging techniques in the animation of characters.
4. Encourage the practical application of character animation principles, emphasizing fluidity of motion, character expression, and storytelling through movement.

**Module 4 - Hands-On Texturing Workshops**

1. Conduct practical workshops guiding students through the process of applying textures to 3D models using industry-standard software like Substance Painter or Photoshop.
2. Provide hands-on experience in creating UV maps, painting textures, and understanding the impact of texture resolution on final renders.
3. Assign projects that require students to apply shading techniques to simulate different materials and achieve specific visual effects.
4. Encourage experimentation with lighting setups and rendering settings to showcase the influence of shading on the final appearance of 3D scenes.

**Module 5 - Hands-On Lighting Workshops**

1. Conduct practical workshops guiding students through the process of setting up lights in a 3D scene using industry-standard software.
2. Provide hands-on experience in creating different lighting scenarios, understanding the impact on the appearance of 3D models.
3. Assign projects that require students to apply advanced rendering techniques and experiment with rendering settings.
4. Encourage students to explore compositing techniques, integrating rendered elements into a final visual composition.



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**Module 6 - Team-Based Animation Projects**

1. Facilitate practical exercises where students work in teams to produce a complete 3D animation project.
2. Emphasize collaboration through the sharing of assets, feedback sessions, and coordinated efforts to address challenges in the production pipeline.
3. Implement a simulated production pipeline, where students experience the stages of 3D animation production, from concept to final render.
4. Encourage students to collaborate on specific tasks, such as asset creation, animation, and rendering, to simulate real-world production scenarios.

**Suggested Reading**

1. "The Animator's Survival Kit" by Richard Williams
2. "Digital Lighting and Rendering" by Jeremy Birn
3. "Character Animation Crash Course!" by Eric Goldberg
4. "Introducing Maya 2019" by Dariush Derakhshani and Randi L. Derakhshani
5. "The Art of 3D Computer Animation and Effects" by Isaac Kerlow

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**Subject Code: BMAGD 403**

**Subject Name: Conceptualization and Storytelling (4L)**

**Course Objective:**

To develop students' ability to conceive, articulate, and communicate compelling narratives across various mediums. Through theoretical exploration and practical application, the course aims to enhance students' skills in crafting engaging stories, emphasizing the importance of concept development, character creation, and plot structure. By the end of the course, participants should have a heightened understanding of the creative processes involved in conceptualizing and telling stories, allowing them to apply these skills in diverse contexts and mediums.

<b>Sl</b>	<b>Course Outcome</b>
1	Develop a proficiency in creative storytelling, enabling participants to conceptualize and articulate narratives effectively across various genres and platforms.
2	Hone the ability to generate and develop creative concepts, fostering a deeper understanding of the conceptualization process and its application in storytelling.
3	Acquire expertise in character development, allowing participants to create well-rounded and compelling characters that resonate with audiences.
4	Develop competence in structuring plots and narratives, understanding the principles of story arcs, pacing, and plot twists to create engaging and cohesive storytelling experiences.
5	Cultivate adaptability in applying storytelling techniques across various multimedia platforms, including written narratives, visual storytelling, and interactive media.
6	Gain skills in effectively communicating stories, whether through written narratives, visual presentations, or other mediums, ensuring that the intended narrative impact is conveyed successfully.

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**BMAGD(T) 403 (4L)**

co	Blooms Level	Modules	%age of questions
CO1	1,2	M1,M2	40
CO3	2,3	M4,M5	60
			<b>100</b>

**Module 1- Introduction to Storytelling Fundamentals**

1. Explore the fundamental elements of narrative structure, including exposition, rising action, climax, falling action, and resolution.
2. Discuss how these elements contribute to the construction of compelling and engaging stories across various mediums.
3. Examine the theoretical principles of character development, discussing the importance of well-rounded characters, motivations, and character arcs in storytelling.
4. Explore how characters evolve and change over the course of a narrative, adding depth and resonance to the overall story.

**Module 2 - Conceptualization Techniques**

1. Explore theoretical frameworks for ideation and brainstorming techniques in the context of creative conceptualization.
2. Discuss methods to foster creativity, generate diverse ideas, and encourage collaborative thinking during the conceptualization phase of a project.
3. Examine theoretical principles related to visualizing concepts, emphasizing the importance of clear and effective communication through visual representation.
4. Discuss how various visual tools, such as mood boards, concept sketches, and mind maps, contribute to refining and articulating creative ideas.

**Module 3 - Interactive Storytelling and Audience Engagement**

1. Explore the theoretical foundations of branching narrative structures in interactive storytelling, where the plot's direction depends on user choices.

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2. Discuss how branching narratives enhance audience engagement by providing a sense of agency and influencing the outcome of the story.
3. Examine theoretical principles related to user experience and immersion in interactive storytelling.
4. Discuss how well-crafted narratives, user interfaces, and interactive elements contribute to a more immersive experience, fostering deeper engagement with the audience.

**Module 4 - Plot Structuring and Narrative Pacing**

1. Explore the theoretical framework of the three-act structure, discussing its origins, principles, and application in structuring compelling narratives.
2. Examine the significance of introducing key plot points, conflicts, and resolutions within each act to create a cohesive and engaging storyline.
3. Examine theoretical principles related to narrative pacing, including the manipulation of time, rhythm, and suspense.
4. Discuss how variations in pacing contribute to audience engagement, creating tension, emotional impact, and maintaining the overall momentum of a story.

**Module 5 - Multimedia Storytelling Strategies**

1. Explore the theoretical principles behind integrating visual and auditory elements in multimedia storytelling.
2. Discuss how the combination of images, videos, sound effects, and music contributes to a more immersive and emotionally resonant storytelling experience.
3. Examine theoretical frameworks for interactive and non-linear storytelling strategies in multimedia.
4. Discuss how user engagement and participation can be enhanced through branching narratives, interactive elements, and other non-linear storytelling techniques.

**Module 6 - Effective Story Communication**

1. Explore the theoretical principles of audience-centric narrative design, emphasizing the importance of understanding the target audience's preferences, expectations, and

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cultural context.

2. Discuss how tailoring storytelling elements to resonate with the audience enhances communication effectiveness.
3. Examine theoretical aspects of creating emotional resonance in storytelling, discussing the role of relatable characters, evocative themes, and compelling conflicts.
4. Discuss how crafting stories with emotional depth contributes to a lasting impact on the audience, fostering connection and engagement.

**Suggested Reading:**

1. "The Anatomy of Story: 22 Steps to Becoming a Master Storyteller" by John Truby
2. "Story: Substance, Structure, Style, and the Principles of Screenwriting" by Robert McKee
3. "The Art of Dramatic Writing: Its Basis in the Creative Interpretation of Human Motives" by Lajos Egri
4. "Into the Woods: A Five-Act Journey Into Story" by John Yorke
5. "Save the Cat! Writes a Novel: The Last Book On Novel Writing You'll Ever Need" by Jessica Brody
6. "On Writing: A Memoir of the Craft" by Stephen King