ASSAM SCIENCE AND TECHNOLOGY UNIVERSITY

Guwahati

Course Structure and Syllabus

MULTIMEDIA COMMUNICATION AND DESIGN (MCD)

SEMESTER VII / MCD /B.DES. (BACHELOR OF DESIGN)

SL.NO	COURSE CODE	COURSE TITLE	L	T	P	C
THEORY/TUTORIAL/PRACTICAL						
1	BMD 171701	Animation Production Design	2	0	6	5
2	BMD 171712	Design Management and Professional Practice	0	0	4	2
3	BMD 171713	Minor Project	0	0	0	12
4	BMD 1717E03*	Elective – III (project based)	0	0	8	4
TOTAL			2	0	18	**23**
Total Contact Hours : 20						
Total Credit : 23						

ELECTIVE - III		
SL.NO	**COURSE CODE**	**COURSE TITLE**
1	BMD 1717E031	Game Design and Production Process
2	BMD 1717E032	Film and Video Design

Course Title: ANIMATION PRODUCTION DESIGN

Course Code: BMD 171701
L-T-P-C: 2-0-6-5

Class Hours/week	8
Expected weeks	12
Total hrs. of classes	96

MODULE	TOPIC	COURSE CONTENT	HOURS
1	**Definition of Computer-based Animation**	Basic Types of Animation: Real Time, Non-real-time, Definition of Modelling, Creation of 3D objects. Exploring the MAYA Interface, Controlling & Configuring the Viewports, Customizing the Max Interface & Setting Preferences, Working with Files, Duplicating Objects, Pivoting, Understanding 2D Splines & shape, Extrude & Bevel 2D object to 3D, Understanding Nurbs, Understanding Polygon, Boolean.	24
2	**Pre-production Knowledge of Pipeline**	Define Concept or Idea, Story & Script develop, Understanding Storyboard design, Making Animatic design, Concept of Layout Design.	16
3	**Production Knowledge of Pipeline**	Explain of Modelling Design, Concept of Texturing, Understanding of Rigging/Setup, Implement of Principle of Animation Techniques, Concept of Lighting and Camera, Understand of basic Rendering.	28
4	**Post Production Knowledge or Pipeline**	VFX and Compositing, Understanding of Motion graphics, Concept of colour correction, implement of Audio Video Editing, Final output.	28
		TOTAL	**96**

TEXTBOOKS / REFERENCES:

1. Chawdhary, Nirmal Kumar, *How to write film screenplay*, Kanishka publishers, distributers, New Delhi- 110002, 2009,ISBN 978-81-8457-112-7.
2. Whitaker, Harold, John Halas, Updated by Tom Sito, *Timing for Animation*, Focal Press Elsevier, New York & Singapore, 2009 ISBN: 978-0-240-52160-2.
3. Eve Light Honthaner, *The Complete Film Production Handbook*, Focal Press.
4. Tay Vaughan, *Multimedia: Making It Work*, Ninth Edition, Mc-Graw Hill Education, 2014.
5. Vic Costello with Susan A. Youngblood and Norman E. Youngblood, *Multimedia Foundations: Core Concepts for Digital Design*, Focal Press, 2013.

6. "*Principle of Traditional Animation applied to 3D computer Animation*" pixer son Rofael California In ACM Computer Graphics (21) 4th July 1987Rubenstein, Paul Max, Writing for Media, Prentice Hall, Englewood Cliffs, New Jersey 07632, 1988. ISBN 0- 13-971508-8.
7. Viers, Ric, *The Sound Effects Bible: How to Create and Record Hollywood Style Sound Effects*, Michael Wiese Productions, 2008.
8. Rumsey, Francis and Tim McCormick, *Sound and Recording*, Focal Press 2009, ISBN: 978024052163.
9. Darren Brooker, *Essential CG Lighting Techniques with 3DS Max*, Third Edition, Focal Press, 2008.
10. Lee Lanier, *Advanced Maya Texturing and Lighting*, Third Edition, Autodesk Maya Press, Wiley.
11. *Timing for Animation -* by Harold Whitaker and John Halas.
12. *Inspired 3D Advanced Rigging and Deformations* by Brad Clark, John Hood & Joe Harkins.

Course Title: DESIGN MANAGEMENT AND
PROFESSIONAL PRACTICE
Course Code: BMD 171712
L-T-P-C: 0-0-4-2

Class Hours/week	4
Expected weeks	12
Total hrs. of classes	48

MODULE	TOPIC	COURSE CONTENT	HOURS
1	**Project – 1**	Performing design projects considering creativity, innovation and management. IPR and Copyright issues and management	20
2	**Project – 2**	Managing design project, Workforce management, Team handling, Client consultation, Business development techniques.	28
		TOTAL	**48**

(A management based design project and execution practice for future professional career.)

Course Title: MINOR PROJECT
Course Code: BMD 171713
L-T-P-C: 0-0-0-12

MODULE	TOPIC	COURSE CONTENT	HOURS
1	**Project**	Project based on hypothetical concepts related to multimedia communication and animation design.	N/A
Minor Project will be done throughout the semester.			

** A Project Report has to be submitted at the end of the Semester by the concerned students to the Department with approval from the Project Supervisor and Committee Members.

Course Title: GAME DESIGN AND PRODUCTION PROCESS
Course Code: BMD 1717E031
L-T-P-C: 0-0-8-4

Class Hours/week	8
Expected weeks	12
Total hrs. of classes	96

MODULE	TOPIC	COURSE CONTENT	HOURS
1	**Project - 1**	Game Design Origins – Understanding Games, Game Rules, Cheats, Cheat-Codes, Easter Eggs; Gameplay Styles and Strategies. Brainstorming and making a simple paper-based game.	36
2	**Project - 2**	Core Game Design Concepts; Introduction to Artificial Intelligence; Visual Design; Detailed Development of Visuals; Navigation and Interfaces; Designing Levels and the Game Design Document.	36
3	**Project - 3**	Sound; Job Descriptions, Game Tracking and Legal Issues; Distribution and Marketing.	24
		TOTAL	**96**

TEXTBOOKS / REFERENCES:

1. Briar Lee Mitchell, *Game Design Essentials*, First Edition, John Wiley & Sons, Sybex, 2012.
2. Keith Burgun, *Game Design Theory: A New Philosophy for Understanding Games*, First Edition, CRC Press, 2013.
3. Richard Rouse III, *Game Design: Theory and Practice*, Second Revised Edition, Wordware Publishing, 2005.
4. Scott Rogers, *Level Up! : The Guide to Great Video Game Design*, Second Edition, John Wiley & Sons, 2014.

Course Title: FILM AND VIDEO DESIGN

Course Code: BMD 1717E032
L-T-P-C: 0-0-8-4

Class Hours/week	8
Expected weeks	12
Total hrs. of classes	96

MODULE	TOPIC	COURSE CONTENT	HOURS
1	**Project - 1**	Pre-production: Concept development, Script writing, Production planning.	30
2	**Project - 2**	Production: Digital film cameras, Lens, Accessories, Digital Image; Technology, Formats, Digital Sound Recording, Formats and Techniques.	32
3	**Project - 3**	Post production: Editing, audio, colour correction, display and distribution.	34
		TOTAL	**96**

TEXTBOOKS / REFERENCES:

1. Steven Ascher, Edward Pincus, *The Filmmaker's Handbook: A Comprehensive Guide for the Digital Age*, Publisher: Penguin Group; New edition, 2008.
2. Katz, Steven D., *Film Directing Shot by Shot: Visualizing from Concept to Screen*, Publisher: Michael Wiese Productions; 1991.

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