
Course Title:	2D Vector Animation
Course Number:	MTM213
Course Prerequisites:	ART103
Credit Hours:	3.0
General Studies Credits:	N/A
Contact Hours:	45 Hours

I. Course Description:

Students will learn techniques in animation using vector-based software such as editing symbols and instances, Flash vector drawing tools, staging, frames, motion and shape tweens, layers, foregrounds and backgrounds. Emphasis will be placed on the design, process and execution of Flash-based movies through the use of crisp graphics, animation and sound.

II. Course Goal:

The course will provides fundamental skills and practices with an industry standard vector-bases animation tool – Adobe Flash, through both technical and creative exercises. By the end of the course, students will have gained the foundational skills and knowledge of the tools and design concepts to be able to engage in further exploration of animation principles, design and creation of their own work in the advanced multimedia courses at UAT.

III. Program Objectives (Core, General Education, Degree):

The outcomes of this course are aligned and developed to support the following Program Objectives. Program Objectives may be supported by multiple courses.

1. General Education:

Objective 1: Students employ a diverse set of thinking approaches in appropriate situational contexts to produce successful outcomes.

Objective 2: Students are able to effectively develop, execute, communicate and give verbal presentations in support of project and initiatives.

2. Digital Media:

Objective 2: Create examples of dynamic, kinetic and generative design work through audio, video, animation, robotics, sculpture, mobiles or process-based art.

Objective 3: Produce multimedia based and multi-modal interactive design projects.

IV. Student Performance Objectives:

Upon successful completion of this course, the student will have met the following objectives:

1. Design and create completed works using vector-based animation programs.
2. Import, create, modify, and animate graphics using multiple techniques.
3. Create graphic symbols, and explore them in your movies to optimize both the size and efficiency of your application.
4. Explore static and input text and Flash components to your movie.
5. Explore and create interactivity to your movies using buttons.
6. Create an interactive movie by using MovieClips, ActionScript 3.0, and by displaying sequential content with screens.
7. Learn how to add sound and video to your movie.
8. Evaluate and judge work using 2D design principles.

V. Standardized Assessments:

1. Week 8: Project: Haiku
2. Week 2: Rocket/Killer in class assignment
3. Week 8: project haiku; Week 3: create a character assignment
4. Week 10: using dynamic text assignment
5. Week 9: chapter 6 assignment
6. Week 10: creating underwater scene; week 15: final project
7. Week 11: dancing robot assignment
8. Week 8: presentations of haiku project; week 15: presentations of the final project

VI. Method of Evaluation:

Rating of the student's success in completing the stated objectives of this course will be based on the following percentiles:

1. Participation = 15 %
2. Exams = 15 %
3. Projects = 40 %
4. Assignments=30%

Please refer to the online Grade book for a breakdown of assignment, tests, quizzes, and projects within the course.

VII Teaching Strategies:

The University of Advancing Technology actively utilizes the Hyper learning model for addressing different adult learning styles. The Hyper learning model consists of five teaching methodologies that include modified lecture/discussion, tutorial teaching with an instructor, tutorial teaching via computer, group recollection, and student teachback. Students will engage in both synchronous learning activities in regular class periods and asynchronous (possibly online) activities. Group activities and team building are strongly encouraged within the synchronous and asynchronous environments.

The University of Advancing Technology holds non-exclusive rights to student projects to publish for promotional purposes only. By attending the school, students give implicit permission for the school to use their work in catalogs, brochures, etc. Students retain original rights to their projects and may market them as they see fit.

VIII. Instructional Materials and References:

Adobe Flash Professional CC: Classroom in a Book, Adobe Team
Other online required texts

IX. Credit Award Rationale:

Course Credit Award: 3 Credits

Class Hours (In Class, Asynchronous):

- Term: 45 Hours
 - 30 hours synchronous (in class)
 - 15 hours asynchronous
- Week: 3 Hours
 - 2 hours synchronous (in class)
 - 1 hour asynchronous

Outside of Class (Reading, Research, Homework, Assignments, Projects, etc):

- Term: 90 Hours
- Week: 6 Hours

X. Course Outline:

2D VECTOR ANIMATION

Week 1

- Weekly Overview: introduction to the course; introduction to Flash CS5 interface*

Course Class Hours

Activity	Time	YRBL	Bloom's	Thinking Styles	Course Objective	Program Objective
Course Overview and outcomes	In Class, 1 hour	Modified Lecture Discovery Learning	Knowledge, Comprehension		MTM213-02	
Lecture: Flash CS5 interface	In Class, 2 Hours	Modified Lecture Discovery Learning	Knowledge, Comprehension		MTM213-02	
Introductions: instructor and students	Asynchronous 1 hour	Discovery Learning	Knowledge			

Course Homework

Activity	Time	YRBL	Bloom's	Thinking Styles	Course Objective	Program Objective
Research internet discuss one example of Flash website	2 hours	NA	Knowledge, Comprehension		MTM213-08	
Assignment: Chapter 1- Coney Island	2 hours	NA	Application		MTM213-02	
Reading: Chapter 1	1hr	NA	Knowledge, Comprehension			

Week 2

- Weekly Overview: Flash – Working with graphics/drawing tools*

Course Class Hours

Activity	Time	YRBL	Bloom's	Thinking Styles	Course Objective	Program Objective
Lecture: Flash drawing tools	In Class, 1 Hour	Modified Lecture, Discovery Learning	Knowledge, Comprehension		MTM213-02	
Presentations of cool site	In Class,	Teach Back,	Analysis		MTM213-08	

In Class assignment: rocket or killer using drawing tools	1 Hour In Class, 1hr	Discovery Learning Discovery Learning	Knowledge, Comprehension	MTM213-01/02
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Course Homework

Activity	Time	YRBL	Bloom's	Thinking Styles	Course Objective	Program Objective
Reading: Chapter 2	1 hour	NA	Application		MTM213-02	
Finish in Class Assignment	2 hours	NA	Analysis, Evaluation		MTM213-01	
Assignment: Aqua Zero Banner	2hrs	NA	Knowledge, Comprehension		MTM213-01/02	
Participation: drawing tools in Flash	1 hr	NA	Synthesis		MTM213-02	

Week 3

- Weekly Overview: Graphic symbols and library; importing Photoshop and Illustrator files into Flash**

Course Class Hours

Activity	Time	YRBL	Bloom's	Thinking Styles	Course Objective	Program Objective
Presentations of Rocket/Killer assignment	In Class, 1 Hour	Discovery Learning	Knowledge, Comprehension Evaluation		MTM213-08	
Lecture: symbols in Flash CS5	In Class, 1 Hour	Discovery Learning	Knowledge Analysis		MTM213-03	
Lecture: Bitmap Images in Flash	In Class, 1hr	Modified Lecture, Discovery Learning	Knowledge, Comprehension		MTM213-02	

Course Homework

Activity	Time	YRBL	Bloom's	Thinking Styles	Course Objective	Program Objective
Reading: Chapter 3	2hrs		Comprehension, Knowledge		MTM213-03	
Assignment: build a character	3hrs		Application		MTM213-01/02/03	

Participation: discuss symbols and instances	1 hr		Analysis			
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Week 4

Weekly Overview: adding animation in Flash: motion and shape tweens

Course Class Hours

Activity	Time	YRBL	Bloom's	Thinking Styles	Course Objective	Program Objective
Lecture and Discussions: animation	In Class, 2 Hours	Discovery Learning Analysis	Application, Analysis		MTM213-02	
In Class assignment: handout: cutting workflow in half	In Class, 1 Hour	Modified Lecture, Discovery Learning	Knowledge, Comprehension Application		MTM213-01/02	

Course Homework

Activity	Time	YRBL	Bloom's	Thinking Styles	Course Objective	Program Objective
Participation: different types of animation	1 hr		Synthesis		MTM213-02	
Reading: Chapter 4	1 hr		Knowledge			
Double Identity assignment	3 hrs		Knowledge, Comprehension Application		MTM213-01/02	
Complete in class assignment	1hr		Application		MTM213-01/02	

Week 5

Weekly Overview: IK and using text in Flash

Course Class Hours

Activity	Time	YRBL	Bloom's	Thinking Styles	Course Objective	Program Objective
Lecture: using different types of text in Flash	In Class 1 hr	Discovery Learning Modified Lecture	Knowledge, Comprehension Analysis		MTM213-04	
In Class: animating text	In Class,	Discovery	Knowledge,		MTM213-01	

2 Hours	Learning,	Comprehension	MTM213-04
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Course Homework

Activity	Time	YRBL	Bloom's	Thinking Styles	Course Objective	Program Objective
Assignment: Octopus and IK	3hrs		Comprehension, Knowledge, Application		MTM213-01/02	
Participation: different types of text	1hr		Analysis		MTM213-04	
Readings: Chapter 5	1hr		Knowledge, Comprehension		MTM213-04	
Complete animating text in class assignment	1hr		Application		MTM213-01 MTM213-04	

Week 6

- ***Weekly Overview: midterm project introduction – haiku movie***

Course Class Hours

Activity	Time	YRBL	Bloom's	Thinking Styles	Course Objective	Program Objective
Presentations of animating text assignment	In Class, 1 Hour	Discovery Learning	Knowledge and Analysis		MTM213-08	
Introduction to Haiku project with samples	In Class, 2 Hours	Modified Lecture, Discovery Learning	Knowledge, Comprehension		MTM213-08	

Course Homework

Activity	Time	YRBL	Bloom's	Thinking Styles	Course Objective	Program Objective
Work on the flash movie project; research and storyboards	6hrs		Knowledge		MTM213-01	

Week 7

Weekly Overview: audio in Flash; haiku project

Course Class Hours

Activity	Time	YRBL	Bloom's	Thinking Styles	Course Objective	Program Objective
Presentations of the storyboards for Haiku project	In Class, 1 Hour	Discovery Learning, Teach Back	Application, Evaluation		MTM213-01	
Lecture: audio	In Class, 1hr	Discovery Learning, Modified Lecture	Comprehension, Knowledge		MTM213-07	
Find other good examples of movies in flash	In Class, 1hr	Teach Back	Analysis		MTM213-08	

Course Homework

Activity	Time	YRBL	Bloom's	Thinking Styles	Course Objective	Program Objective
Assignment: audio	2hrs		Application Analysis		MTM213-01	
Work on Haiku project animation	4hrs		Application, Synthesis		MTM213-01/03	

Week 8

Weekly Overview: presentations and critique of haiku movie project

Course Class Hours

Activity	Time	YRBL	Bloom's	Thinking Styles	Course Objective	Program Objective
Presentations of haiku project	In Class, 3 Hours	Discovery Learning	Evaluation		MTM213-08	

Course Homework

Activity	Time	YRBL	Bloom's	Thinking Styles	Course Objective	Program Objective
Post Critique	3hrs		Application, Synthesis		MTM213-08	
Mid-term exam	3hrs		Synthesis		MTM213-08	

Week 9

Weekly Overview: introduction to actionscript 3.0 in Flash and adding basic interactivity

Course Class Hours

Activity	Time	YRBL	Bloom's	Thinking Styles	Course Objective	Program Objective
Lecture: introduction to AS3 buttons	In Class, 2 Hours	Discovery Learning, Modified Lecture	Application, Evaluation		MTM213-05	
In Class assignment: create animated buttons	Asynchronous, 1hr	Discovery Learning	Knowledge, Comprehension, Application		MTM213-01/02/03 MTM213-05	

Course Homework

Activity	Time	YRBL	Bloom's	Thinking Styles	Course Objective	Program Objective
Reading: Chapter 6 – creating interactive navigation	1hr		Comprehension, Knowledge		MTM213-05	
Complete in class buttons assignment	1hr		Application, Analysis		MTM213-01/02/03 MTM213-05	
Assignment from Chapter 6	4hrs		Application		MTM213-01/02/03 MTM213-05 MTM213-07	

Week 10

Weekly Overview: controlling movie clips; controlling dynamic text using as3

Course Class Hours

Activity	Time	YRBL	Bloom's	Thinking Styles	Course Objective	Program Objective
Lecture: movie clips and loading external content	In Class, 2 Hours	Discovery Learning	Comprehension, Knowledge		MTM213-04	
In Class assignment: underwater scene using movie clips and as3	In Class, 1 Hour	Discovery Learning	Comprehension, Knowledge		MTM213-01/02/03	

Course Homework

Activity	Time	YRBL	Bloom's	Thinking Styles	Course Objective	Program Objective
Reading: chapter 7	1hr		Comprehension, Knowledge		MTM213-04	
Discussion: the purpose of as3	1hr		Analysis, Evaluation		MTM213-04	
Assignment from the book: using dynamic text	3hrs		Application		MTM213-01 MTM213-04	
Complete underwater scene assignment	1hr		Application		MTM213- 01/02/03	

Week 11

Weekly Overview: using video and controlling sound in Flash, using components and as3

Course Class Hours

Activity	Time	YRBL	Bloom's	Thinking Styles	Course Objective	Program Objective
Presentations of underwater scene assignment	In Class, 1 Hour	Discovery Learning	Evaluation		MTM213-08	
Lecture: video and components in Flash	In Class, 1 Hour	Discovery Learning, Modified Lecture	Comprehension, Knowledge, Application		MTM213-04 MTM213-07	
Dancing Robot in class assignment – using audio	In-Class, 1 Hour	Discovery Learning	Knowledge, Application		MTM213- 01/02/03 MTM213-07	

Course Homework

Activity	Time	YRBL	Bloom's	Thinking Styles	Course Objective	Program Objective
Assignment: controlling video in flash	4hrs		Application		MTM213-01 MTM213-04 MTM213-07	
Complete robot assignment	1hr		Application		MTM213- 01/02/03	
Reading: chapter 8	1hr		Comprehension,		MTM213-04	

Knowledge

Week 12

Weekly Overview: loading external content and introduction to the final project

Course Class Hours

Activity	Time	YRBL	Bloom's	Thinking Styles	Course Objective	Program Objective
Lecture: loading external content using as3	In Class, 1 Hours	Discovery Learning, Modified lecture	Knowledge, Comprehension		MTM213-04	
Introduction to the final project – interactive landscape	In-Class, 1 hr	Discovery Learning,	Knowledge, Comprehension		MTM213-06	
Research interactive stories using flash on the internet	Asynchronous, 1hr	Discovery Learning	Knowledge, Comprehension		MTM213-06	

Course Homework

Activity	Time	YRBL	Bloom's	Thinking Styles	Course Objective	Program Objective
Reading: Chapter 9	1hr		Knowledge, Comprehension		MTM213-06	
Discussion: pros and cons of loading external content into Flash movies	1hr		Analysis		MTM213-06	
Assignment: chapter 9	4hrs		Application		MTM213-01	

Week 13

Weekly Overview: Publishing Flash files and 3D in Flash

Course Class Hours

Activity	Time	YRBL	Bloom's	Thinking Styles	Course Objective	Program Objective
Screening of 3D Flash applications	In Class, 1 Hour	Discovery Learning	Knowledge Comprehension		MTM213-08	
Lecture: how to publish	In Class,	Discovery	Knowledge,		MTM213-01	

movies in Flash	1hr	Learning, Modified Lecture	Comprehension			
Work on storyboards for the final project	Asynchronous, 1hr	Discovery Learning,	Knowledge, Analysis			MTM213-08

Course Homework

Activity	Time	YRBL	Bloom's	Thinking Styles	Course Objective	Program Objective
3D assignment	2 hrs		Application		MTM213-01	
Work on the final project	4hrs		Knowledge, Application, Synthesis		MTM213-01 MTM213-06	

Week 14

Weekly Overview: work on the interactive landscape project

Course Class Hours

Activity	Time	YRBL	Bloom's	Thinking Styles	Course Objective	Program Objective
Presentations of 3D assignment	1hr	Discovery Learning,	Evaluation		MTM213-08	
Work on final project	In Class, 2 Hours	Discovery Learning, Teach Back	Synthesis, Application		MTM213-01 MTM213-06	

Course Homework

Activity	Time	YRBL	Bloom's	Thinking Styles	Course Objective	Program Objective
Work on the final project	6hrs		Synthesis, Application		MTM213-01 MTM213-06	

Week 15

Weekly Overview: Final project Presentations; final exam

Course Class Hours

Activity	Time	YRBL	Bloom's	Thinking Styles	Course Objective	Program Objective
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Presentations of the Final	In Class, 2 Hours	Discovery Learning	Evaluation	MTM213-08
Critiques	Asynchronous, 1Hour	Teach Back	Analysis and Evaluation	MTM213-08

Course Homework

Activity	Time	YRBL	Bloom's	Thinking Styles	Course Objective	Program Objective
Feedback on the course	1hr		Evaluation		MTM213-08	
Post-Critique	1hr		Evaluation		MTM213-08	
Final Exam	4hr		Evaluation		MTM213-08	

XI. Date of Last Review of Syllabus:

2/1/15

The nature of course delivery necessitates some flex in the outline of the course due to holidays, project work, etc. Courses can potentially vary from the stated outline but will cover all of the material listed in the outline of the course.