

9-2014

## MAR 323.01M: 3D Motion Design

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MART 323

## **3D Motion Design**

Autumn 2014 - The University of Montana, Missoula

McGill 127

Professor: Greg Twigg

**Office Hours:** Monday: 11-12 | Wednesday: 1-2 | Friday: 10:30-12:30

**EMAIL:** [greg.twigg@umontana.edu](mailto:greg.twigg@umontana.edu)

### **COURSE DESCRIPTION**

This course provides instruction of the fundamental principals of digital compositing, with emphasis on: 3D composition, concept, layering, digital cinematography, lighting, and the animation of images in time and space in order to establish a common aesthetic and technical language necessary to develop quality time-based art and design.

This is a BFA studio course where artists will integrate production techniques, various forms of digital design, and create original time-based digital compositions as an expressive and communicative art form. Aesthetic, technical and conceptual issues will be addressed through lectures, demonstrations, projects, and critiques.

Students are evaluated based on their contribution to the class discussions, critiques, and technical proficiency with various media and toolsets.

### **OBJECTIVES**

Students will demonstrate understanding of the following principles and techniques through studio assignments:

- Concepts and Terminology
  - compositing
  - composition
  - color perception
  - animation
  - spatial relationship
  - timing
  - cause and effect
  - blending techniques
  - three-dimensional staging and lighting.
- Application of still image based software in conjunction with motion and time based software :Adobe After Effects, Photoshop, Illustrator and others.
- Project Development and presentation

### **TOPICS**

- Project Setup
- Composition
- 3-D Staging
- 3-D Cameras

- 3-D Lighting
- Motion Theory
- Basic Particles
- Track Mattes
- Professional Production Techniques

## **GRADING**

### **Philosophy**

It is a common misconception that teachers assign grades when in reality it is the student who earns the grade. You are responsible for the effort put into each project therefore you assign your own grade. The purpose of grading, from a teachers perspective, is to clearly and accurately pinpoint the strengths and weaknesses of your progress.

### **Evaluation**

Your overall grade will be based on your understanding of the information and ideas discussed, your formal, technical, and conceptual progress as demonstrated in projects, your participation in class discussions, and professionalism during the course.

Grades will be based on the following formula:

Project 1 will account for **25%**

Project 2 will account for **25%**

Final Project will account for **35%**

Final Exam will account for **15%**

Each project will be graded on the application of technique and conceptual principles to the creative work, the organization of the production process, participation, technical proficiency with the various software applications, their aesthetic application, problem solving, project presentation and the ability to meet deadlines. The exercises/projects and descriptions are listed on the 15-week schedule sheet.

### **Expectations for class participation**

Participation by all members is critical to the success of this studio. Excellent participation is a given and includes contributing to ongoing discussions and critiques, suggests alternative ways of approaching projects, along with a thoughtful process and strong work ethic.

### **Attendance & participation**

Good attendance and punctuality are expected for this course and will strongly affect your grade. Only three (3) unexcused absences will be allowed. Every unexcused absence beyond this will lower your grade by a letter grade. A total of seven absences, excused or unexcused, will result in you receiving a grade of "F" for the class. Excused absences include religious holidays, a verifiable death in the family or illness with a doctor's note.

### **Classroom etiquette**

You are expected to conduct yourself with proper respect for the classroom environment. Disruptive behavior will not be tolerated. **Turn off your cell phones** and beepers prior to class. (Does anyone even have beepers anymore?)

### **THE LAB**

• **What this lab is.....** This lab has been established so that students in the **Media Arts department** can have a dedicated lab in which to do their course work. You will have Griz Card access to this lab all day, every day. After hours access to the McGill building (locked after 10pm) can now be activated via approved Griz Cards on the south entrance nearest the tennis courts.

• **What this lab is not.....** This lab will **not** be used to work on things that are outside of the course requirements and will not be used by students outside of the program. If you want to spend time fooling around with your friends, then do it at home. Abuse of this lab will not be tolerated.

### **SOFTWARE INFORMATION**

The primary software programs that you will be using are:

- **Adobe After Effects**
- **Adobe Photoshop**
- **Adobe Illustrator**
- **Cinema 4D**

You will also be using the Internet and the network browser in the lab.

• It is important that throughout the class you take advantage of the manuals, the program help menu, and related articles downloaded from the web.

**THIS COURSE SYLLABUS IS SUBJECT TO CHANGE AT THE DISCRETION OF THE INSTRUCTOR.**

### **Academic Misconduct and the Student Conduct Code**

All students must practice academic honesty. Academic misconduct is subject to an academic penalty by the course instructor and/or disciplinary sanction by the University. All students need to be familiar with the Student Conduct Code. The Code is available for review online at [http://life.umt.edu/vpsa/student\\_conduct.php](http://life.umt.edu/vpsa/student_conduct.php).

Students with disabilities may request reasonable modifications by contacting me. The University of Montana assures equal access to instruction through collaboration between students with disabilities, instructors, and Disability Services for Students (DSS). "Reasonable" means the University permits no fundamental alterations of academic standards or retroactive modifications. For more information, please consult <http://www.umt.edu/disability>

<p>MAR 222</p> <p>Production Schedule</p>
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Fall 2014

Week 1 8/28	Week 2 9/4	Week 3 9/11	Week 4 9/18	Week 5 9/25
<b>Tues</b> Intro Creative Juices	<b>Tues</b> Review 3D Basics Space, Camera Lights	<b>Tues</b> Lights Shadows Transmission Nulls/anim	<b>Tues</b> Studio Day	<b>Tues</b> Studio Day
<b>Thur-----</b> Review Keyframes Projects/Comps Shapes Time	<b>Thur-----</b> <b>Intro to P2</b> <b>3D Journal</b> Multicam Nulls Depth of Field	<b>Thur-----</b> Lighting for color correction	<b>Thur-----</b> P1 Rough cut critiques	<b>Thur-----</b> <b>Proj. 1 3D</b> <b>Timeline</b> <b>Due</b>  Critique

Week 6 10/2	Week 7 10/9	Week 8 10/16	Week 9 10/23	Week 10 10/30
<b>Tues</b> <b>Intro to P2</b> <b>3D Journal</b>	<b>Tues</b> 3D shapes Extruding Editing vectors	<b>Tues</b> Echo Space	<b>Tues</b> P2 Rough cut critiques	<b>Tues</b> Studio Day
<b>Thur-----</b> Precomposing Moving through comps	<b>Thur-----</b> Trapcode Intro 3D Stroke	<b>Thur-----</b> Dust and atmosphere	<b>Thur-----</b> Studio Day	<b>Thur-----</b> <b>Proj. 2 Cutsce</b> <b>Due</b>  Critique

Week 11 11/6	Week 12 11/13	Week 13 11/20	Week 14 11/27	Week 15 12/4
<b>Tues</b> <b>NO CLASS</b> <b>GO VOTE!!</b>	<b>Tues</b> 3D Camera Tracking	<b>Tues</b> Using pre-made 3D models in AE	<b>Tues</b> P3 Rough cut critiques	<b>Tues</b> Studio Day
<b>Thur-----</b> <b>Intro to P3</b> <b>Music Video</b> Green Screen Work Compositing in	<b>Thur-----</b> Filming Mattes	<b>Thur-----</b> <b>Thanksgiving</b> <b>No Class</b>	<b>Thur-----</b> Studio Day	<b>Thur-----</b> <b>FINAL EXAM</b>  <b>FINAL PROJECTS</b> <b>WILL BE VIEWED</b> <b>DURING FINALS</b>