

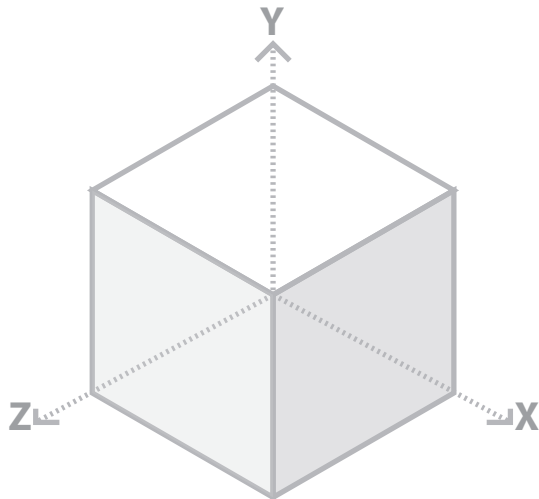
2007 SPRING SEMESTER
59 Carroll Hall
Tuesday and Thursday
09.00-10.50 a.m.

Alberto Cairo Assistant professor
79 Carroll Hall
(919) 8435841
cairo@email.unc.edu
www.albertocairo.com
Office Hours Monday and
Wednesday, 11.00 a.m.-12.00 p.m.
and by appointment

JOMC492.007

3D Design Studio

Maya for Information Graphics



3D is a powerful tool for creating infographics. The most advanced 3D program is Maya, the standard in the film and broadcast animation and special effects industries.

In JOMC492.007 you will learn the basic tools of Maya (modeling, texturing, lighting, animation and rendering) by completing several information graphics exercises and projects.

Description and policies

Course description

In 3D Design Studio we will discuss the use of 3D software for informational graphics and visual presentations. We will focus on journalistic narratives but the skills I will teach you will be useful for many other purposes. During this class you will learn basic techniques with Maya 7, one of the standard tools for videogames, special effects and animated movies.

It is very important to remember that **attendance is required** (unexcused absences will affect your final grade) and deadlines are absolute. If you need to miss a class, it is your responsibility to tell me in advance and to make up the work.

I expect that you will conduct yourselves within the guidelines of the UNC-CH Honor Code. All work must be completed with the high level of honesty and integrity that this University demands.



Required reading

Introducing Maya 7: 3D for Beginners
Dariush Derakhshani - John Wiley & Sons (2005)

Suggested readings

Learning Maya 7: Foundation
Marc-Andre Guindon - Sybex (2005)

Macromedia Flash MX 2004 Hands-on Training
Rosanna Yeung - Peachpit Press (2003)

Items to purchase

CDs and USB stick

For submitting exercises and to back up your files. Please, remember that you are responsible for backing up your work. No deadline can be missed due to loss of data.

Sketchbook, pencils and pens

Any assignment must be sketched before you start working with the computer

Assignments and grading*Grading*

This is a project-oriented course. Therefore, the grading will be based on **two graded exercises and two projects**.

Components

Modeling and texturing Exercise 1	100
Modeling and texturing Exercise 2	100
P1- Historic and Famous sites in China	400
P2 -The Fire Red Ant	400
Total	1,000

Scale

Points	Grade
950-1,000	A
920-949	A-
890-919	B+
840-889	B
800-839	B-
770-799	C+
730-769	C
700-729	C-
680-699	D+
630-679	D
600-629	D-
599 and below	F

Notes

Please, be aware that I reserve the right to change grades at the end of the semester in some cases according to class attendance, participation in discussions and the overall quality of your lab exercises.

Assignments and grading

Grading criteria: In-lab exercises and projects

During the course we will be completing several **lab exercises** with Maya, Flash, Illustrator and Photoshop. Two of them will be graded but the others will not. The exercises are intended to give you a better understanding of the software and to get you ready for the **final projects**. We will do in-class reviews both of exercises and projects.

Be prepared to work on exercises and projects out of class. You will have time during sessions for hands-on work but that will **never** be enough. Learning 3D is very time consuming. It is your responsibility to organize your time in order to meet the deadlines. Consider your production speed and make plans accordingly. Always work in advance. And remember that I will be available to help you.

There are several expectations that you should meet in order to get a high grade. These are the general grading criteria I will be using for the projects:

1. Every project must be completed on time
2. News value of the presentation. How much information is given with clearness and accuracy
3. Spatial organization, structure of the elements
4. Quality of the 3D models, lighting and rendering
5. Aesthetic design choices in general
6. Creativity

You can check more detailed guidelines for projects in the next pages.

Out of class exercises

I will be glad to review other out of class exercises if you are interested. We can do this during office hours or by appointment. However, it is very important for you to remember that **these exercises will not be considered whatsoever** for your final grade.

Course calendar

		<i>Discussion</i>	<i>Practice</i>
<i>January</i>	Thursday 11	Introduction to the course, orientation to the lab. introduction to Maya - Maya Basics	--
	Tuesday 16	Basic Techniques: modeling, texturing, lighting and rendering I	In-lab Exercise
	Thursday 18	Basic Techniques: modeling, texturing, lighting and rendering II	In-lab Exercise
	Tuesday 23	Basic Techniques: modeling, texturing, lighting and rendering III	In-lab Exercise
	Thursday 25	Basic Techniques: modeling, texturing, lighting and rendering IV	In-lab Exercise
	Tuesday 30	Basic Techniques: modeling, texturing, lighting and rendering V	In-lab Exercise
<i>February</i>	Thursday 1	--	In-lab Exercise
	Tuesday 6	--	In-lab Exercise
	Thursday 8	Advanced Modeling and texturing I	In-lab Exercise
	Tuesday 13	Advanced Modeling and texturing II	In-lab Exercise
	Thursday 15	Advanced Modeling and texturing III	In-lab Exercise
	Tuesday 20	Building an online animated infographic I	In-lab Exercise
	Thursday 22	Building an online animated infographic II Guidelines for the first project	In-lab Exercise
	Tuesday 27	--	Project 1
<i>March</i>	Thursday 1	--	Project 1
	Tuesday 6	--	Project 1
	Thursday 8	--	Project 1

Course calendar

		<i>Discussion</i>	<i>Practice</i>
	Tuesday 13	SPRING BREAK	SPRING BREAK
	Thursday 15	SPRING BREAK	SPRING BREAK
	Tuesday 20	--	Project 1
	Thursday 22	--	Project 1
	Tuesday 27	<i>Due at the end of class: Project 1</i>	Project 1
	Thursday 29	Animation and advanced techniques I	In-lab Exercise
<i>April</i>	Tuesday 3	Animation and advanced techniques II	In-lab Exercise
	Thursday 5	Animation and advanced techniques III Guidelines for the Second Project	In-lab Exercise
	Tuesday 10	--	Project 2
	Thursday 12	--	Project 2
	Tuesday 17	--	Project 2
	Thursday 19	--	Project 2
	Tuesday 24	--	Project 2
	Thursday 26	<i>Due at the end of class: Project 2</i>	Project 2

Project 1

Historic and Famous Sites in China

Based on the information that I will give you, we will pick several famous buildings in Shanghai and in China in general, such as the Longhua Temple or the Jade Buddha Temple.

You will have to design a detailed and textured model of one of those buildings. Based on that 3D model, you will create a simple animated graphic that will explain the main features of the site. These pieces might be part of the Special Olympics 2007 coverage, that will be designed by students of the Journalism School of UNC-Chapel Hill.

This project is due on March 27th at the end of class.

Project 2

The Fire Red Ant

In this project we will produce an **animated information graphic** about the Red Imported Fire Ant (RIFA, or *solenopsis invicta*), a very aggressive species, considered a pest by the US Government, that started invading the country in the 1930s.

From the Wikipedia: “RIFA are more aggressive than most native ant species and have a painful sting. A person typically encounters them by inadvertently stepping into one of their mounds, which causes the ants to swarm up the person’s legs, attacking en masse. The ants respond to pheromones that are released by the first ant to attack. The ants then swarm and immediately sting when any movement is sensed”.

“RIFA are efficient competitors to other ants, and have been successful at enlarging their range, notably in the United States, where they have gradually spread north and west despite intense efforts to stop them. Today they are found in most of the southeastern states, including Texas, Oklahoma, Louisiana, Arkansas, Mississippi, Alabama, Tennessee, Georgia, Florida, North Carolina, South Carolina, Maryland, and Virginia. It is not uncommon for several fire ant mounds to appear suddenly in a suburban yard or a farmer’s field, seemingly overnight. Even in the San Francisco, California area, there are large numbers of red imported fire ants”.

In this project you will model and texture a Fire Red Ant and create a short Flash presentation that will combine an animation with a short audio track. I will give you more details in class, but you can start gathering some information about the animal.

This project is due on April 26th at the end of class.