DePaul CIM	**3D Design and Modeling** Spring 2014 **｜** T 5:45-9:00pm **｜** CDM 722 Instructor: Josh Jones
ANI 230	Office: CST 517 Email: jjones@cim.depaul.edu (best way to reach me) Phone: (312)362-5876 Office hours : Tu: 3:00-4:00pm, 9:00-10:00pm Th: 10:00-11:00am

Course Description

Students will use computer modeling to explore the principles of 3-dimensional design. Projects involving object, character and architectural modeling will emphasize the aesthetic concepts of spatial proportion (scale, angle and position), silhouette, negative space, rhythm, balance, light/shadow and texture. Students will emerge with the ability to create well designed 3D models, and be familiar with the basics of polygonal modeling, texturing, lighting and rendering for animation, computer games and cinema. PREREQUISITE(S): None

Course Objectives

After completing this course, students will have:

1. Gained basic concepts and understanding of tools related to 3D production.
2. Become comfortable with basics of modeling, lighting, texturing and rendering.
3. Understand the fundamentals of strong 3D design.

Texts and Materials

REQUIRED TEXTS:
None

RECOMMENDED TEXTS:
Introducing Maya 2013 by Dariush Derakhshani Publisher: Sybex

The Art of 3D Computer Animation and Effects, Fourth Edition (Paperback)
Isaac Kerlow, Publisher: John Wiley & Sons; 2009

Reference Websites
www.autodesk.com
www.learning-maya.com
www.creativecrash.com
www.awn.com
www.animationlodge.blogspot.com

Attendance

Students are expected to attend every class. We cover an enormous amount of material in every class, and missing even one can be a huge setback.

Three absences will result in the lowering of your final grade one full letter. Any student missing 4 classes will be given a grade of "F" for the semester.

The student is responsible for any lectures or assignments missed. If an assignment is due a week that you are absent, it is your responsibility to make sure it still arrives on time. A good portion of our class time will be spent doing hands on tutorials, screening films, and critiquing work. Lecture notes will not make up for these missed learning experiences.

You may not miss the final class critique. Doing so will equal an automatic two letter grade reduction of your final grade. If for some reason you cannot make this class contact your instructor BEFORE the class that you must miss. Excuses given after the fact will not be accepted.

No incompletes will be given without documented proof of circumstances beyond your control.

Participation   One of the best ways to learn in a classroom environment is through *active* participation in discussions and critiques. In general, we will be following a pattern of creating animation and then discussing it in critique in the following week. When I open up the floor for you to speak, please make the effort to voice your honest and constructive opinion. You are likely to find that this will greatly improve your overall learning process.

Class Work   ASSIGNMENTS
- Must be handed in on time. "On time" means submitted through COLWeb one hour BEFORE class on the day the assignment is due. Students who use class time to finish assignments the day they are due will forfeit the right to hand in that assignment.
- Late work:
  - Late work will not be accepted unless approved of PRIOR to the class in which it is due or accompanied by a valid medical excuse.
  - You are allotted one "freebie" per term that allows you to turn in ONE assignment late for full credit (up until the 10th week of the term). You only get one of these per term. All other late assignments are forfeited.
- Written Assignments: Must be typed.
- Digital Assignments: Must be submitted in the following format (please note upper and lower case usage)
  - lastnameFirstname_projectname.extension
  - example: jonesJosh_projectOne.mb

* Special Accommodations: If you have any special considerations please see me.

* BACK UP YOUR WORK: Failure of computer software and or hardware will not be accepted as an extenuating circumstance for late projects or incomplete grades so back up your work on a regular basis.

Critiques   Unless I tell you otherwise, assigned work must be completed and submitted through COLweb one hour BEFORE class starts. This will keep us from wasting valuable class time. **Handing in something unfinished is always better than nothing at all.** Due to the large size of our class, and the limited class time, not everyone's work will get a full review during class. If you'd like more feedback, arrange to discuss your work with me during my office hours. We will view and discuss everyone's final project during the last class.

Grading	Assignments	100% of grade

	A = 100-93	A- = 92-90	
B+ = 89-88	B = 87-83	B- = 82-80	
C+ = 79-78	C = 77-73	C- = 72-70	
D+ = 69-68	D = 67-63	D- = 62-60	F = 59-0

Your grade will depend on the following criteria:

- **Meeting Project Deadlines:** It is vital to have your work available for critique. Work unavailable for critique will be considered late and will not be accepted unless you are using your one "freebie."
- Creativity and personal input into execution of project
- Coming prepared to class, including assigned reading and assignments
- Showing in-progress work, which can benefit from suggestions, rather than presenting entirely new work at critiques
- Effective visually aesthetic solutions to all problems assigned
- Taking initiative to work outside of class and research
- Hard work and sweat
- Participation in critiques and discussions

Cell Phones   Use of cell phones in the class and the lab is prohibited. Please turn your phone off before entering class. Mistakes will happen (to me too), but repeated failure to turn your phone off will result in a lowered grade for the class. All phone conversations should be conducted outside the class – don't disturb those working in the lab and put others in an uncomfortable situation.

Headphones   Whether working with sound in your project, or simply listening to music while working, you need to be considerate of others and wear headphones. Be aware that if the volume is high enough, others can still hear what you're listening to despite the headphones. Inconsiderate behavior will result in a lowered grade.

Academic Integrity   Work done for this course must adhere to the DePaul University Academic Integrity Policy, which you can review in the *Student Handbook* or by visiting http://studentaffairs.depaul.edu/homehandbook.html.

Plagiarism   The university and school policy on plagiarism can be summarized as follows: Students in this course, as well as all other courses in which independent research or writing play a vital part in the course requirements, should be aware of the strong sanctions that can be imposed against someone guilty of plagiarism. If proven, a charge of plagiarism could result in an automatic F in the course and possible expulsion. The strongest of sanctions will be imposed on anyone who submits as his/her own work a report, examination paper, computer file, lab report, or other assignment which has been prepared by someone else. If you have any questions or doubts about what plagiarism entails or how to properly acknowledge source materials be sure to consult the instructor.

Materials and   All assignments in this class will be either transmitted digitally online or via

Supplies   CD/DVD. Instructor will notify preferred method of submission for each assignment.

All CDROM's and DVD's must be labeled clearly with the following information:
        -Your name
        -The name of the assignment
        -The class number and name you are submitting the assignment for
        -The term (ex. Fall 2006)

Schedule

This schedule is subject to change throughout the semester, and will be adapted to fit the needs of the students.

Unless otherwise noted, all assignments will be submitted online 1 hour prior to class. Assignments may be submitted earlier.

	<u>Lecture</u>	<u>Assignment</u>
Week 1 April 1	Intro to Maya Abstraction and Silhouette Basic Principles of 3D Design Abstracting Animals In Class Exercise: Simple Fan	Practice making the fan. Make your goal to be able to create the fan from scratch in under 5 minutes. **Assignment:** Abstracted Animals Bring a shoe to class with you next week!
Week 2 April 8	Simple Polygon Modeling Low Poly Shoe Normals <u>Don't forget to bring your shoe to class!</u>	**Assignment**: Low Poly Shoe
Week 3 April 15	Abstracting Objects Color Theory Introduction to Hypershade	**Assignment**: Everyday Object 2D/3D
Week 4 April 22	Defining Character **In Class:** Sturdy/Elegant Research Proportions Deformers	**Assignment**: Portman and the Hulk
Week 5 April 29	Intro to Architecture Repetition, Variety, Rhythm Expanding color palettes	**Assignment**: Think Tank
Week 6 May 6	Defining Architectural Style Intro to texturing Creating texture tiles	**Assignment**: Model Office of the Overlord
Week 7 May 13	Introduction to lighting Rendering	**Assignment**: Texture and Light Office of the Overlord

Week 8 May 20	Character Design and Organic Modeling Chimera Rough	**Assignment :** Chimera Research and Mockup
Week 9 May 27	Refining a character model Redirecting Edge Loops Transitions in modeling	**Assignment**: Chimera Single Mesh Model
Week 10 June 3	UV Unwrapping Transitions in texturing Animating a Turnaround	**Assignment**: Final Chimera turn-arounds and renders with textures
FINAL June 10	Final Critique! Tuesday June 10th from 5:45-9:00 p.m. **ATTENDANCE IS MANDATORY**	