

DePaul
CIM

Advanced 3D Character Animation

Winter 2014 | T/Th 11:50-1:20| CDM 722

Instructor: Josh Jones

ANI 301
ANI 431

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

This course introduces advanced concepts in 3D character animation that are necessary for achieving professional quality results. Students will hone their skills through the study of advanced techniques for animating multiple characters, creating continuity, and building character through performance. An emphasis will be placed on the exploration of movement for developing personal style. Prerequisites: ANI 300/430

Course Objectives

- 1) Develop more sophisticated skills for character performance
- 2) Expand your knowledge of animating advanced physical movements to convey weight and force
- 3) Experiment with both realistic and highly exaggerated styles of animation while refining your own approach to the medium
- 4) Identify professional practices and standards in animation industry, while creating your own advanced work to enhance your demo reel

Texts and Materials

REQUIRED TEXTS

"The Animators Survival Kit"

Richard Williams, Publisher: Faber and Faber Inc. 2001, Cost \$30.00.

<http://cdmflash.cdm.depaul.edu/coltube/movie>

RECOMMENDED TEXTS

"Stop Staring"

By Jason Osipa

REFERENCE WEBSITES

www.autodesk.com

www.creativecrash.com

www.awn.com

Attendance

Student absences are not expected to exceed more than 2 absences. A 3rd absence 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. This is for your benefit. 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 midterm or final class date. Doing so will equal an automatic two letter grade reduction of your final grade. If for some reason you cannot make one of these dates you must 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. This will help you learn from your mistakes and progress with your animation skills.

Class Work

Assignments

- Must be handed in on time. Late assignments will not be accepted on teacher discretion only. On time is submitted through COLweb one hour BEFORE class starts. Students who use class time to finish assignments the day they are due will forfeit the right to hand in that assignment. Class time is for working with the material at hand, not finishing late assignments.
- 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 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: All assignments handed in digitally must be in the following format (please note upper and lower case usage)
 - lastnameFirstname_projectname.extension
 - example: jonesJosh_projectOne.mov

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

* 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 daily.

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. In most cases (I'll let you know the exceptions) I request that you use **QuickTime** format unless discussed with me previously. AVI's are difficult to watch frame by frame (something we will be doing a lot of). **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	75% of grade
	Final Project	25% of grade
	Total	100%

	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 a 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 Supplies

All assignments in this class will be transmitted digitally online through COLWeb unless otherwise noted.

Any assignment handed in late or when not present in class may be put on a CDROM, DVD, or flash drive and delivered to the 4th floor desk of CDM to be put in my mailbox.

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 2014)

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 in digital format online 1 hour prior to class. Assignments may be submitted earlier.

	<u>Lecture</u>	<u>Assignment</u>
Week 1 Jan 7, 9	Introduction Lecture: Recap animation principles and workflow intro to "hyper-real"	For Thursday: Blocked Hyper real action For Next Tuesday: Completed hyper-real action
Week 2 Jan 14, 16	Critique hyper-real assignments Lecture: Intro to "hyper-exaggeration" Techniques to add flexibility to CG movements Squash and Stretch in 3D	For next week: Hyper-exaggeration action
Week 3 Jan 21, 23	Critique hyper-exaggeration assignments Lecture: Physics for animators. Working with weight, energy, and momentum.	For next week: Pushing and Pulling exercise
Week 4 Jan 28, 30	Critique Push/Pull Assignment Lecture: More Physics! Playing with balance and establishing weight. Using <i>constraints</i> to animate props.	For next week: Lifting Exercise
Week 5 Feb 4, 6	Critique Lifting Assignment Lecture: Pops n Takes. Limited animation. Establishing good character. Bad acting and the cliché.	For next week: Boring Assignment
Week 6 Feb 11, 13	Critique Boring Assignment Lecture: Animating multiple character shots and crowd scenes, referencing and importing assets	For next week: Dual Character Shot Keys and Extremes
Week 7 Feb 18, 20	Review In Progress Shots Lecture: Let's Fight! Punching, kicking, hard-hitting impacts	For next week: Dual Character Shot Completed

<p>Week 8 Feb 25, 27</p>	<p>Critique Dual Character Shots</p> <p>Lecture: Animated run cycle- the basics and creating character</p>	<p>For next week: Run Cycles</p>
<p>Week 9 March 4, 6</p>	<p>Critique Run Cycles</p> <p>Introduce Final</p> <p>Lecture: Animating across the cut, working with sequences, Gaming Cycles</p>	<p>For next week: Final Blocking</p>
<p>Week 10 March 11, 13</p>	<p>Individual progress critiques on final projects</p> <p>Lecture: High Level Polish</p>	<p>For next week: Final due!</p>
<p>Week 11 March 18</p>	<p>Final Critique! Tuesday March 18th from 11:45 – 2:00 p.m. Attendance is mandatory.</p>	