DePaul CDM	**3D Character Animation**
	Winter 2016 **|** Mon 10:10am - 11:40am **|** CDM 527
	Instructor: Brian Ferguson
ANI 300 ANI 430	Office: CDM 461 Email: bfergus3@cdm.depaul.edu (best way to reach me) Phone: (312)362-1422 Office hours : Mon & Wed: 9:00am - 10:25am, 3:10pm - 5:00pm

Course Description This course explores the art and techniques for character performance in 3D. Students will study and employ fundamental principles for character animation beginning with the essentials of blocking and Inbetweening, and continuing with the core mechanics including walk cycles, expressions, and lip sync. Students are required to animate weekly shots culminating in a final lip synced character performance. PREREQUISITE(S): ANI 231 or ANI 405

Course Objectives After completing this course, students will have:

1. An extensive knowledge of Maya's animation tools.
2. A broad understanding of all animation styles and techniques, and how they apply to and can aid animation in 3D.
3. A solid base in animation fundamentals.
4. Professional demo reel quality work.

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 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. Any student missing 3 classes or more 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 be accepted with teacher discretion only. 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. 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.mb

* 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 80% of grade
Final Project 20% 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 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	**Lecture:** "Character Bones" The aesthetics of a good pose Working effectively with a rig	**Assignments:** Character observation and Rendered Emotion Poses
Week 2 Jan 14	**Review Poses** **Lecture:** Review of pose-to-pose and straight ahead animation styles. The 3D animation process. The Body as a Unit Moving Line of Action Soft and Hard accents. Inverse Kinematics vs. forward Kinematics.	**For Next Class:** Big Step Exercise *Read ASK "Spacing" pg. 84-99. Read ASK "Anticipation" pg. 273-284 and "Reaction" pg. 294-296.*
Week 3 Jan 21	**Critique Keys and Extremes** **Lecture:** The art of Inbetweening. Spacing, slow in/slow out, breakdown poses, moving on arcs, overlapping action.	**For next class:** Do breakdowns and inbetween Big Step animation from last week. *Read ASK "flexibility" pg. 227-245 and "overlapping action" pg. 249-251.*
Week 4 Jan 28	**Critique final Step One animation** **Lecture:** Blocking out a complex shot Physics study vs. Character study Animation Observation	**For next week:** Pro Blocking
Week 5 Feb 4	**Critique Pro Blocking** **Lecture**: The walk cycle. Giving walks character! Establishing weight.	**For next class**: Complete two character walk cycles. *Read ASK "The Walk Cycle" pg. 102-124.*
Week 6 Feb 11	**Critique character walk cycles** **Lecture:** Character expression. Eyes, eyebrows, and blinks. Changing expression Creating character through expression	**For next week:** Find headshot dialogue and thumbnail out storyboard of thought progression. *Read ASK "Dialogue" pg. 304-313.*

Week 7 Feb 18	**Lecture:** Continue with expression. Quick n' Dirty lip sync.	**Due next week:** Head shot animation. Must be lit and rendered as a quicktime movie for next week.
Week 8 Feb 25	**Critique head shot animations.** **Introduce Final Project** **Lecture:** Giving your characters business– context, subtext and layered performance Performance in animation: Realism, exaggeration, over-acting	**For next class: F**ind a sound clip. Thumbnail out a storyboard including all key poses for the action. Lay out key poses and extremes for your shot. Submit animation as a playblast **with sound**.
Week 9 Mar 4	**Review animation pop-throughs** **Lecture:** Bringing more life into characters. A to X to B	**For next class:** Add breakdowns and begin inbetweening on your shot *Read ASK pg. 217-227*
Week 10 Mar 11	**Individual and peer critiques on final progress** "High brow" lip sync.	**For next class**: Final animation is due
Week 11 March 18	**Animation Final** **Tuesday March 18th, 5:45-9:00 pm** **ATTENDANCE MANDATORY**	**Due: Final Project.** **Rendered and lit.**