

ANI 231-402 Intro to 3d Animation
Autumn Quarter 2023
TuTh 3:10-4:40 14 E. Jackson rm. 505

Instructor: Jacqueline Smessaert Brennan

Email: jbrennan@cdm.depaul.edu (I do my best to return emails within 24 hours)

Office Hours: TuTh 9:15 - 10:am, 11:45am -1:15pm or by appointment

CDM 615 or [Zoom](#)

Important Dates:

Sep 12 (11:59pm) – Last day to add or swap classes

Sep 19 – Last day to drop classes with no penalty (after this day grade of W assigned)

Sep 21 – Last day to select pass/fail option

Oct 24 – Last day to withdraw from AQ 2021 Classes

Nov 14 – End AQ 2022 Day and Evening Classes

Nov 15 – Begin AQ 2022 Day and Evening Final Exams

Nov 22 – End AQ 2022 Day and Evening Final Exams

Course Description:

This is an introductory course in 3D animation. It will emphasize traditional animation principles as applied to 3D animation. Topics will include: principles of animation, storyboarding, transformations and deformations of 3D objects, rigging, camera and light animation. This course has an additional fee.

This is a hands-on class with a weekly assignment, so be prepared to devote a bit of time each week to these assignments. The digital assignments will be done using Autodesk Maya which are available in the student labs of the CDM building. Again, make sure that you allow time in your schedule to access the labs so that your assignments may be completed on time.

A free student version of Autodesk Maya can be downloaded here:

http://students.autodesk.com/?nd=download_center

Prerequisite: ANI-230

Learning Outcomes:

After completing this course, students will have:

1. A solid base in animation fundamentals.
2. The ability to use Maya's specific animation tools to apply fundamentals to animation
3. An understanding of how camera and lighting affect animation, and how they can be used together to tell a story.

Course Policies:

Changes to Syllabus:

This syllabus is subject to change as necessary during the quarter. If a change occurs, it will be thoroughly addressed during class, posted under Announcements in D2L and sent via email.

Texts and Materials:

Optional Textbook:

The Animator's Survival Kit

Richard Williams, Publisher: Faber and Faber Inc. 2001

COURSE MANAGEMENT SYSTEM:

D2L is where all course information can be found and assignments will be turned in: <https://d2l.depaul.edu/>

Assignments and Exercises :

Must be handed in on time. On time is submitted through D2L BEFORE class starts. **Please** do not use class time to finish up an assignment due that day. Class time is for working with the material at hand, not finishing late assignments. There are a few special caveats for this class:

1. Late work: Late assignments will be accepted on teacher discretion only unless approved of PRIOR to the class in which it is due or accompanied by a valid medical excuse, 10 points will be deducted for each day the assignment is late.
2. Emergency Late Pass: You are allotted one "LATE PASS" per term that allows you to turn in ONE late assignment for full credit IF the assignment is turned in WITHIN ONE WEEK of the original due date . You only get one of these per term. All other late assignments are subject to deduction of points.
3. The "Re-do" policy. Animation is one of those disciplines where persistence really does pay off. Here is a great quote by Disney animator Milt Kahl that really sums it up :

"It's a very difficult medium. Animation necessarily requires a pretty good draftsman, because you've got to turn things, to be able to draw well enough to turn things from every angle. You have to understand movement, which in itself is quite a study. You have to be an actor. You have to put on a performance, to be a showman, to be able to evaluate how good the entertainment is. You have to know what's the best way of doing it, and have an appreciation of where it belongs in the picture. you have to be a pretty good story man. To be a really good animator, then, you have to be a jack-of-all-trades. I don't mean to say that I'm all these things, but I try hard. I got accused over the years of being a fine draftsman. Actually, I don't really draw that well. It's just that I don't stop trying as quickly. I keep at it. I happen to have high standards and I try to meet them. I have to struggle like hell to make a drawing look good."

In light of this, and to encourage people to turn in work even if it's a bit of a disaster, I do allow students to resubmit or "re-do" up to 3 assignments per quarter so that they may better their skill set and, in turn, their grades. There are a few guidelines to the "re-do" policy:

1. You must clear the “re-do” with me ahead of time.
2. You must inform me when you have re-submitted (the D2L does not show this automatically) in writing via e-mail
3. All re-do assignments must be handed in by the last day of class during week 8. I want you to spend those last few weeks focused on your final project

Assignments in this class will be submitted digitally via D2L.

Your files should follow the naming convention lastname_assignmentname.mb (or .ma)

Weekly Assignments

You will have a weekly animation assignment to be completed in Maya. Generally speaking we will begin the assignment in class and you will finish it on your own. There will also be some viewing and reading assignments from Richard Williams’ *The Animator’s Survival Guide*.

Final Project

In lieu of a final exam, you will be required to plan and create a 10 second piece of animation using the techniques and animation principles we will have learned throughout the quarter. Critiques of these projects will take place during our regularly scheduled exam time.

Ball Bounce In-betweened by hand	30	3	9/14
3 Ball Bounces using Graph Editor	100	10	9/19
Hierarchical Animation/Self- propelled object	100	10	9/26
Lamp Hop	100	10	10/3
Walk Cycle	100	10	10/10
Successive Breaking of Joints	100	10	10/17
DIY Rig	100	10	10/24

Rough Storyboard for Final Project	50	5	10/31
Pose Test/Animatic	70	5	11/7
Rough Draft	50	5	11/14
Final Project	200	20	11/21 @ 2:30-4:45
TOTALS	1000	100	

GRADING BREAKDOWN

A = 100-93 %	A- = 92-90%	B+ = 89-87%
B = 86-83 %	B- = 82-80%	C+ = 79-77%
C = 76-73%	C- = 72-70%	D+ = 69-67%
D = 66-63%	D- = 62-60%	F = 59-0%

****Your grades are based upon completion of assignments when due, quality of work, active class participation and attendance.****

Grading

All undergraduate students

Students in all undergraduate classes, with the exception of those in CEO cohort programs, may opt to change the grading basis for any or all of their courses to Pass/D/Fail. A grade of Pass (P) will indicate that the student's work met expectations for a grade of at least C-. Work that would merit a grade of D+ or D in the traditional grading basis would still earn a D+ or D. Work that does not merit a passing grade will earn a Fail (F). The Pass/D/Fail grading option may apply to any graduation requirement, including courses in the major, minor, Liberal Studies Program or open electives.

<https://resources.depaul.edu/coronavirus/faqs/Pages/classes-academics-students.aspx>

Absences:

Obviously, the pandemic has not left us yet so if you are not feeling well, you should stay home. Other than that, you are expected to attend class and participate. **IF YOU ARE UNABLE TO ATTEND CLASS, YOU MUST CONTACT ME ON OR BEFORE THE DAY OF THE ABSENCE AND I WILL MARK THE ABSENCE AS EXCUSED.** If you are going to have an extended absence due to illness or emergency you should contact the university:

<https://offices.depaul.edu/student-affairs/support-services/academic/Pages/absence-notification.aspx>

Classroom Expectations:

Many of us have been out of circulation a bit during the pandemic. As we come together again on campus, let's just remember to show each other some basic considerations. Texts and phone calls should only be made in case of emergency and taken outside of the classroom so as to reduce distractions for those around you.

Similarly, I ask that during class time lab computers, laptops, tablets, phones etc. be used for in class work. Visiting other websites and doing other coursework not only keeps you from participating in the class but also distracts others around you.

Changes to the Schedule – Depending on time factors, the assignments projected for the term may require slight alteration or rescheduling. Any changes will be discussed in class and posted on D2L.

CLASS SCHEDULE FOR Autumn 2021 (subject to change due to time constraints)

Week/date	Topics	Due dates
Week 1 9/7	<p>Topic: Intro to class and Maya 3d animation tools</p> <p>CONCEPTS AND TOOLS COVERED: In addition to going over the syllabus to establish overview and expectations for the quarter ahead, we will be getting our feet wet with the basic animation tools in Maya. We will go over timeline, playback and various ways to set keyframes.</p>	
Week 2 9/12-9/14	<p>Topic: Eases</p> <p>CONCEPTS AND TOOLS COVERED: Ghost tool and motion trail. We will do a frame by frame animation of a bouncing ball.</p>	<p>Manual Inbetweens 9/14</p>
Week 3 9/19 - 9/21	<p>TOPIC: Fine tuning animation timing, intro to graph editor and splines.</p> <p>CONCEPTS AND TOOLS COVERED:</p> <p>We will become familiar with the graph editor and the dope sheet.</p>	<p>3 Unique Ball Bounces 9/19</p>

<p>Week 4 9/26 - 9/28</p>	<p>TOPIC: Hierarchical Animation, Anticipation and deformation.</p> <p>CONCEPTS AND TOOLS COVERED: We will be studying the concepts of timing and anticipation in order to give character to a simple object. We will continue our exploration of deformers as well as camera and basic rendering.</p>	<p>Self-Propelled, Self-Motivated Object</p> <p>9/27</p>
<p>Week 5 10/3 - 10/5</p>	<p>TOPIC: Simple rigging, secondary actions and follow through.</p> <p>In class we will build a simple lamp model and animate a hop using forward kinematics.</p>	<p>Lamp Hop</p> <p>10/03</p>
<p>Week 6 10/10 -10/12</p>	<p>TOPIC: Lower Body animation with emphasis on variation of walks.</p> <p>CONCEPTS AND TOOLS COVERED: We will be discussing walk cycles and how basic steps can be used to create a naturalistic walk with character as well as the concept of follow through as it is seen in the arm movement.</p>	<p>Walk Cycle</p> <p>10/10</p>
<p>Week 7 10/17 - 10/19</p>	<p>TOPIC: Successive Breaking of Joints</p> <p>CONCEPTS AND TOOLS COVERED: We will talk about creating fluidity in character animation by understanding that not all body parts stop and start at the same time.</p>	<p>Successive Breaking of Joints</p> <p>10/17</p>

<p>Week 8</p> <p>10/24 - 10/26</p>	<p>TOPIC: Customizing a full body rig.</p> <p>CONCEPTS AND TOOLS COVERED: Working with a full body rig (FK arms and IK legs), parenting basic objects to a rig to create a customized character. If we have time, we will also cover blend shapes and other facial animation.</p>	<p>DIY Rig</p> <p>10/24</p>
<p>Week 9</p> <p>10/31 -11/2</p>	<p>TOPIC: Planning and storytelling in animation.</p> <p>CONCEPTS AND TOOLS COVERED: We will discuss the importance of pre-production planning and storyboarding.</p>	<p>Storyboard due</p> <p>11/3 Thursday</p>
<p>Week 10</p> <p>11/7 - 11/8</p>	<p>TOPIC: Cameras and Lenses</p> <p>CONCEPTS AND TOOLS COVERED: We will take a closer look at camera options such as depth of focus, use background shader and switch lenses.</p>	<p>Rough Draft</p> <p>11/10 Thursday</p>
<p>Week 11</p> <p>11/14-11/16</p>	<p>I will be checking in with individuals on final projects Tuesday the 15th</p> <p>Final Projects due Thursday</p>	<p>Final Project</p> <p>11/17 @ 11:30</p>

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COVID-19 Health and Safety Precautions The health and safety of everyone at DePaul depend on the cooperation of all who come to campus. By taking care of yourself, you protect the entire community. DePaul's COVID-19 response plans are based on the latest guidance from the Centers for Disease Control and Prevention, the Chicago Department of Public Health and the university's medical advisor from AMITA Health. Mandatory protocols must be followed by DePaul students, faculty and staff at all times on both campuses

<https://resources.depaul.edu/coronavirus/guidance/health-safetypractices/Pages/default.aspx>.

Respect for Diversity and Inclusion At DePaul University as aligned with our Vincentian Values At DePaul, our mission calls us to explore "what must be done" in order to respect the inherent dignity and identity of each human person. We value diversity because it is part of our history, our traditions and our future. We see diversity as an asset and a strength that adds to the richness of classroom learning. In my course, I strive to include diverse authors, perspectives and teaching pedagogies. I also encourage open dialogue and spaces for students to express their unique identities and perspectives. I am open to having difficult conversations and I will strive to create an inclusive classroom that values all perspectives. If at any time, the classroom experience does not live up to this expectation, please feel free to contact me via email or during office hours.

Online Course Evaluations Evaluations are a way for students to provide valuable feedback regarding their instructor and the course. Detailed feedback will enable the instructor to continuously tailor teaching methods and course content to meet the learning goals of the course and the academic needs of the students. They are a requirement of the course and are key to continue to provide you with the highest quality of teaching. The evaluations are anonymous; the instructor and administration do not track who entered what responses. A program is used to check if the student completed the evaluations, but the evaluation is completely separate from the student's identity. Since 100% participation is our goal, students are sent periodic reminders over three weeks. Students do not receive reminders once they complete the evaluation.

Please see

<https://resources.depaul.edu/teaching-commons/teaching/Pages/onlineteaching-evaluations.aspx> for additional information.

Academic Integrity and Plagiarism This course will be subject to the university's academic integrity policy. All students are expected to abide by the University's Academic Integrity Policy which prohibits cheating and other misconduct in student coursework. Publicly sharing or posting online any prior or current materials from this course (including exam questions or answers), is considered to be providing unauthorized assistance prohibited by the policy. Both students who share/post and students who access or use such materials are considered to be cheating under the Policy and will be subject to sanctions for violations of Academic Integrity

Posting work on online sites, such as Hero

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Academic Policies

All students are required to manage their class schedules each term in accordance with the deadlines for enrolling and withdrawing as indicated in the University Academic Calendar. Information on enrollment, withdrawal, grading and incompletes can be found at: <http://www.cdm.depaul.edu/Current%20Students/Pages/PoliciesandProcedures.aspx>

Incomplete Grades

An incomplete grade is a special, temporary grade that may be assigned by an instructor when unforeseeable circumstances prevent a student from completing course requirements by the end of the term and when otherwise the student had a record of satisfactory progress in the course. All incomplete requests must be approved by the instructor of the course and a CDM Associate Dean. Only exceptions cases will receive such approval. Information about the Incomplete Grades policy can be found at <http://www.cdm.depaul.edu/Current%20Students/Pages/Grading-Policies.aspx>

Preferred Name & Gender Pronouns

Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with differences of race, culture, religion, politics, sexual orientation, gender, gender variance, and nationalities. I will gladly honor your request to address

you by an alternate name or gender pronoun. Please advise me of this preference early in the quarter so that I may make appropriate changes to my records. Please also note that students may choose to identify within the University community with a preferred first name that differs from their legal name and may also update their gender. The preferred first name will appear in University related systems and documents except where the use of the legal name is necessitated or required by University business or legal need. For more information and instructions on how to do so, please see the Student Preferred Name and Gender Policy at <http://policies.depaul.edu/policy/policy.aspx?pid=332>

Students with Disabilities

Students seeking disability-related accommodations are required to register with DePaul's Center for Students with Disabilities (CSD) enabling them to access accommodations and support services to assist with their success. There are two office locations:

- Loop Campus (312) 362-8002
- Lincoln Park Campus (773) 325-1677
- Email: csd@depaul.edu

Students who register with the Center for Students with Disabilities are also invited to contact Dr. Gregory Moorhead, Director of the Center, privately to discuss how he may assist in facilitating the accommodations to be used in a course. This is best done early in the term. The conversation will remain confidential to the extent possible.

Please see <https://offices.depaul.edu/student-affairs/about/departments/Pages/csd.aspx> for Services and Contact Information.