

F/TV 71G “Introduction to 3D Computer Animation: Character Modeling” Fall 2022

Course Time:

F 10:30 pm - 1:20 pm LEC
F 1:30 pm - 4:20 pm LAB

Instructor

Name: Genevieve Freckelton
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Location

Online ONLY: Canvas
Previously in room AT102
Final Exam: Friday, Dec. 16
9:15 am - 11:15 am

Office Hrs.
Online: Canvas or Zoom
F: 4:30 pm – 5:30 pm

Prerequisites

None

Student Learning Outcomes (SLOs)

Create a cinematic still, displaying an understanding of modeling, texturing and lighting in addition to composition for storytelling. Course Description Techniques of three-dimensional model creation as applied to objects, characters and environments. Principles of modeling, surface mapping, lighting and rendering with application to 3D computer animation.

Welcome!

Welcome to **Introduction to 3D Computer Animation: Character Motion**. I’m glad you’re here and I look forward to working with you this quarter. I hope you have fun and learn a lot! I believe that every student who works hard at it can succeed in this class. Please talk to me if you have any questions or concerns during the quarter—I’m here to help.

Course Work

This course requires 6 or more hours per week of work outside of class. If you can’t devote this much time to your homework, you may want to consider taking the class another quarter when you’ll have more time.

The work includes taking notes, light reading, following demo’s, research, sketching, shooting reference video, in-class assignments, homework assignments, and participating in class (attendance, discussions and critiques).

Instructor/Student Interactions

Email is the fastest way to reach me. I do my best to respond to messages within 24 hours (although it may take longer).

Required Texts

No textbook is required. Assignment instructions and handouts will be provided on Canvas.

Supporting Texts & References

Allen, Eric, and Kelly Murdock. "Body Language: Advanced 3D Character Rigging." Sybex, 2008.

Birn, Jeremy. "Digital Lighting and Rendering." New Riders, 2013.

Capizzi, Tom. "Inspired 3D Modeling & Texture Mapping." Boston, MA: Premier Press, 2002.

Ingrassia, Michael. "Maya for Games: Modeling and Texturing Techniques with Maya and Mudbox." Focal Press, 2008.

O'Hailey, Tina. "Rig it Right! Maya Animation Rigging Concepts." Focal Press, 2013. Roy, Kenny.

"How to Cheat in Maya 2014: Tools and Techniques for Character Animation". First edition. MA: Focal Press, 2014.

Parrish, David. "Inspired 3D Lighting & Compositing." Boston, MA: Premier Press, 2002.

Patnode, Jason. "Character Modeling with Maya and ZBrush: Professional polygonal modeling techniques." Focal Press, 2008.

Software

Autodesk Maya 2019, 2020 or 2022

Required Materials

The following things are required for the course.

- Regular access to Canvas, Zoom, web articles, and online tutorials
- Computer with Maya installed on it and a 3-button mouse
- Personal media storage device to back up and transport your work: ~ 1 GB
- Sketchbook or notebook (something to take notes with and draw/sketch on)

Recommended

If you have your own personal computer, see if it meets the requirements for running Autodesk Maya 2019 or 2020: <https://knowledge.autodesk.com/support/maya/learn-explore/caas/sfdcarticles/sfdcarticles/System-requirements-for-Autodesk-Maya-2019.html>.

If it does, I recommend you install your own copy of Maya on it, so you are able to work on the assignments at home, in addition working in the computer lab. You can get the student version (it's FREE!) of Maya here:

<https://www.autodesk.com/education/home>. Create an account with your De Anza e-mail address and download Maya. The current student version of Maya is exactly like the professional version, except you can't use it to make money.

Grading

Your final grade consists of:

Participation 20%

Assignments 80%

Professional Behavior

Professionalism is a quality which 97.5% of employers list as either “absolutely essential” or “essential” for a new college hire’s success.

Essentially, being professional is about giving your best at all times. You think about how your behavior will be perceived by others and make sure you understand and follow the given codes of conduct. You are honest, respectful, responsible, use your time effectively, and produce high quality work.

I expect students to conduct themselves in a professional manner at all times while in the classroom. Therefore, please come to class prepared to respect each other and your shared workspace, and give your best. The classroom is not the place to sleep, or surf the web, or text your friends, so if you are doing this repeatedly, I will ask you to leave, and if it continues, I may drop you from the course.

Disruptive Behavior

Disruptive behavior is engaging in any activity which degrades the learning environment for everyone. Some examples are: sleeping, doing ANYTHING not related to the class during class time, talking loudly or making noise while other people are trying to work, disrespectful or hurtful language or behavior, and excessive domination of class discussions.

Disruptive behavior will not be tolerated. I’ll warn students who engage in such behavior and lower their participation grade. If the behavior continues, students may be asked to leave the classroom and/or be dropped from the course.

For more information, please refer to the Student Rights and Responsibilities page at [:https://www.deanza.edu/student-development/conduct.html](https://www.deanza.edu/student-development/conduct.html)

Participation

Your contributions are important! **By participating in class you help create a positive learning environment for you and your classmates.** Participation can also make the difference between an A and a B!

In addition to other designated participation activities, participation points will be given based on the student’s daily participation in classroom discussions, activities and critiques. Disruptive behavior will lower this score.

9 - 10 points Maximum participation

7 – 8 points Participated only when called upon or asked to, or arrived late, or left early

0 - 6 points Did not participate, or engaged in disruptive behavior, or came late + left early

Attendance Policy

- **Unless otherwise stated, attendance for the entire length of the lecture is required.**
- I will take attendance at some point during class. If you're not there when I take attendance, you will be marked as absent and receive zero participation points for that day.
- **A student may be dropped after 2 absences, regardless of the reason.**
- Arriving late or leaving early will reduce your participation points for that day.
- Please contact me ahead of time to make arrangements for an absence, and as soon as possible for absences due to illness or emergencies.

Classroom Policy

- The classroom and classroom resources are for academic purposes and should only be used for work connected to a class.
- Food and beverages (except for closed water bottles) are NOT allowed on your desk in the classroom. We'll have breaks where you can use the restroom or eat.
- **Unless otherwise stated, cell phones and other hand-held electronic devices should be silenced and put away at all times.** *Please note that using a hand-held electronic device during class time for activities unrelated to class is disruptive behavior and will result in a lowered participation score.* If it becomes a problem, I may ask all students to put their electronic devices on my desk for the duration of the class.
- Store your working files in your SAN folder, not on the classroom computers.
- Always save and backup your work. **You are responsible for your lost data**, not the faculty, computers, software, or other students.
- Always log out of the computer's animation account before you leave.

Assignments Policy

- All assignments will have instructions. Please read them carefully.
- It is the student's responsibility to find out when assignments are due, and to submit their assignments on time, in the correct place, and in the correct format.
- **All assignments should be your own new, original work.** You will get a 0 for turning in work from a different class, a previous quarter of this class, or another assignment in this class. Needless to say, you will also get a 0 for turning in work created by someone else; this is considered cheating and is taken very seriously by De Anza College.
- Assignments turned in on time are eligible for revision.

Late Assignment Policy

- Assignments are due BEFORE class starts, unless otherwise stated. Once class has started, the assignment is late.
- **Always check the closing date of the assignment on Canvas.** Some assignments cannot be turned in late and will close on the due date. Assignments turned in after the closing date are given a 0.
- Late assignments will be reduced by 1 letter grade every week they are late.

- Late assignments are not eligible for revision.
- All assignments, late or otherwise, must be turned in by the Friday before finals week.
- Please do not work on a late assignment without permission during any part of the class; if I see you doing this, your grade on that assignment will automatically be reduced by 50%.
- If you know that a situation will prevent you from turning something in, contact me in advance of the deadline to make arrangements.

Missing Assignment Policy

In our animation production classes, assignments make up the biggest part of your grade. Missing one assignment will negatively affect your grade, and missing two assignments will *severely* affect your grade. Therefore...

- If a student has missed 2 assignments, regardless of the reason, they may be dropped from the class.
- All missing assignments will be given a 0.

Revisions Policy

- If an assignment has been turned in on time, and received a letter grade below a B-, the student can revise it for a higher grade. If the revised assignment shows significant improvement, I'll raise the grade.
- A revised assignment will not be given a grade higher than a B-.
- All revisions must be turned in before finals week.

Drop Policy

- **It is the student's responsibility keep track of their progress and, if needed, to drop the class with a "W" by the drop date.**

Failure to withdraw from the class in a timely manner and failure to communicate your intentions may result in a grade of F

- A student may be dropped, without warning from me, from this class for several reasons, including:
 - 2 absences without prior notification or discussion
 - Missing 2 assignments, combined with failure to communicate with instructor
 - Severe or chronic disruptive behavior

Grade Definitions and GPA

A+	Excellent: 4.0 points
A	Excellent: 4.0 points
A-	Excellent: 3.7 points
B+	Good: 3.3 points
B	Good: 3.0 points
B-	Good: 2.7 points
C+	Satisfactory: 2.3 points
C	Satisfactory: 2.0 points
D+	Not Passing, less than satisfactory: 1.3 points

- D Not Passing, less than satisfactory: 1.0 point
- D- Not Passing, less than satisfactory: 0.7 point
- F Failing: 0.0 points
- FW Failed to Withdraw: 0.0 points (*This is new; it's given when students fail the course because they stopped coming to class and turning in work.*)
- P Pass (at least satisfactory): units awarded not counted in GPA
- NP No Pass (less than satisfactory, or failing): units not counted in GPA
- I Incomplete: Not used to calculate GPA. Academic work is incomplete for unforeseeable, emergency and justifiable reasons at the end of the term. At least 75 percent of the class must have been completed to qualify for Incomplete status.

W A "W" will be assigned to all drops occurring between 20 percent and 75 percent of completion of a term. After this period, a student can be awarded a "W" only by means of an Extenuating Circumstance Petition, in which s/he provides documentation proving "verifiable reason" such as illness or incarceration. In the absence of the petition and documentation, a grade will be assigned to the student record. While a "W" will not be used in calculating GPA, it will be used as a factor in probation and dismissal procedures. It is also used to calculate enrollment limits; that is, students may not enroll in the same course more than three times, which includes both "W" and substandard grades.

Academic Integrity

I assume all my students will pursue their studies with honesty. However, students need to know what constitutes academic dishonesty at De Anza College. Incidents of academic dishonesty are taken very seriously. Read about it on the following pages:

<https://www.deanza.edu/policies/academicintegrity.html>

<https://www.deanza.edu/studenthandbook/academic-integrity.html>

Special Accommodations

De Anza College views disability as an important aspect of diversity and is committed to providing equitable access to learning opportunities for all students. If you have a condition that will affect your work, you must register with Disability Support Programs & Services (DSPS). A doctor's note is not enough. While I am sympathetic to your personal or medical issues, if you are not registered with DSPS you will not get special accommodations in this class.

Disability Support Services (DSS) is the campus office that collaborates with students who have disabilities to provide and/or arrange reasonable accommodations. If you have, or think you have, a disability in any area such as, mental health, attention, learning, chronic health, sensory, or physical, please contact DSS to arrange a confidential discussion regarding equitable access and reasonable accommodations.

If you are registered with DSS and have accommodations set by a DSS counselor, please be sure that your instructor has received your accommodation letter from Clockwork early in the quarter to review how the accommodations will be applied in the course. Students who need

accommodated test proctoring must meet appointment booking deadlines at the Testing Center. a) Midterm exam be booked at least five (5) business days in advance of the instructor approved exam date/time. b) Final exams must be scheduled seven (7) business days/weekdays in advance of the instructor approved exam date/time. Failure to meet appointment booking deadlines will result in the forfeit of testing accommodations and you will be required to take your exam with the class.

DSS Location: RSS Building, Suite 141

<http://www.deanza.edu/DSS/>

Phone: 408-864-8753

Email: DSS@deanza.edu

Student Success Center

Need help? De Anza's Student Success Center offers free online and on-campus tutoring and workshops! Visit <http://www.deanza.edu/studentsuccess> for our hours and information.

- Academic Skills Center for workshops in ATC 302
- General Subject tutoring in ATC 304
- Listening & Speaking and World Language support in ATC 313
- Math, Science and Technology tutoring in S43
- Writing and Reading tutoring in ATC 309
- Disability Support Services in SCS 141

Student Success Center Resources are available online to all De Anza students on Canvas:

<https://deanza.instructure.com/enroll/MAF7Y8>

Schedule & Assignments

Week	Day	Date	Topic	Homework
01	F	9/30	Intro to Maya 3D Surfaces Polygonal Modeling 1	<i>Read Syllabus Greebles</i>
02	F	10/7	Polygonal Modeling 2 Cameras, Lighting, Texturing, Rendering	<i>Milk Crate</i>
03	F	10/14	Polygonal Modeling 3	<i>Cartoon Car</i>
04	F	10/21	Polygonal Modeling 4 Environment Modeling 1	<i>Block Out Simple Environment</i>
05	F	10/28	Environment Modeling 2 Ambient Occlusion	<i>Refine & Render Simple Environment Read: Arnold Renderer for Maya</i>

06	F	11/4	Intro to Lighting & Rendering with Arnold Image-Based and HDR Lighting	<i>Render previous projects with Arnold</i>
07	F	11/11	No Class Intro to Robot Project Referencing	<i>Simple Robot Reference</i>
08	F	11/18	Basic Character Modeling Character Topology <i>Talk: 3D Modeling Applications by Shalan Ertis</i>	<i>Simple Robot Model</i>
09	F	11/25	No Class	<i>Thanksgiving</i>
10	F	12/2	Skeleton & Skinning	<i>Skin, Pose, Texture, Light, and Render your Robot</i>
11	F	12/9	Basic Sculpting Jobs & ePortfolio Presentation	<i>E-Portfolio Presentation</i>
12	F	12/16	FINALS, CLASS IS @ 9:15 am - 11:15 am	

Important Dates

September 26	Fall classes begin
October 8	Last day to add classes
October 9	Last day to drop classes without a W
November 11	Veterans Day holiday – no classes; offices closed
November 18	Last day to drop classes with a W
November 24-27	Thanksgiving holiday – no classes; offices closed
December 12-16	Final exams

Technical Supervisor, Film/Television Department

Please contact the technical supervisor if you need assistance with any of our facilities or equipment.

Phone: (408) 864-8391

Office Hours in AT 109: M - F 10:00 am – 1:00 pm, 2:00 pm – 7:00 pm

Equipment Checkout in AT 110: M - F 11:00 am – 12:45 pm, 2:00 pm – 6:30 pm

Lab Access

Labs may have limited hours.

You may work on the computers in **ATC 104 (Animation Lab)** or **ATC 102 (F/TV Computer Lab)** when other classes aren't using them. Please take advantage of this! The PC's in both labs are identical and have the same software installed.

You can ask Tom Schott, or any F/TV faculty member, to open the labs for you. Do not go to Campus Security or the Creative Arts Division office for room access.

Lab Software:

Autodesk Maya

Autodesk Mudbox

Autodesk 3D Max

Autodesk Motionbuilder

TV Paint 10

Toon Boom's Harmony 17

Adobe CC Photoshop

Adobe CC Illustrator

Adobe CC Animate

Adobe CC Premiere

Adobe CC After Effects

Adobe CC Audition

Dragonframe

MonkeyJam

Audacity

Sonicfire Pro

File Storage

The F/TV Department uses a special file storage system. Each F/TV class has class folders for shared files, and a password-protected folder for each student to store their work. Step-by-step instructions for accessing SAN folders will be provided via email.

Files on the SAN are deleted at the end of every quarter. Please back-up your important files on your own personal media storage device.

Equipment & Facilities

The Film/Television Department has professional equipment and facilities available for student use, including:

<i>Item</i>	<i>Location</i>	<i>Access</i>
Wacom digital drawing tablets	ATC 110	Checkout by the hour or for the whole quarter. See Tech Supervisor
Desks with animation drawing discs	ATC 104	When AT 104 is open
High-speed feed scanner	"	"
High-speed feed scanner	"	"
Acme pegs paper punch	"	"
Pencil-testing stations, digital capture via Dragonframe or MonkeyJam	ATC 104A	"
Stop-motion equipment, digital capture via Dragonframe or MonkeyJam	ATC 104B	"
Zoom F4 Multitrack Field Recorders	ATC 110	Checkout with Tech Supervisor
Microphones	"	"
Headphones	"	"
Foley recording room	ATC 121	Reserve with Tech Supervisor