Ms. Lily Maloney
Contact: Canvas Email
Office: Online/Zoom
Office Hours: Mon & Wed Period 8
(3:00pm – 4:00pm)

DIG3305C 3D Digital Animation Techniques
Fall 2025

Course Meetings: Asynchronous Online Course. Course content is released weekly.
Course Modality: Online Asynchronous

Course Description

Practical techniques for the implementation of three-dimensional digital animations. Basic principles of 3D design workflow in modeling, texturing, lighting, rendering and animation. Understanding basic object and bipedal motion and key-framing using both industry-standard and open-source tools to perform a frame-by-frame study of traditional and contemporary motion picture animation.

Course Prerequisites

DAR major and DIG 3313C with minimum grade of C

Learning Outcomes

By the end of this course, students will be able to:

- Understand the general workflow for creating 3D assets for film or games
- Understand image sequences and postproduction process of 3D animation.
- Apply materials that control 3D surface appearance of digital objects.
- Create original digital 3D objects and animations.
- Create/manage key frames for animated films

Materials & Books

Required

- The Animator's Survival Kit, Richard Williams 2nd Edition 978-0571238347
- Autodesk Maya 2024.2 Educational Version (Free for students) DOWNLOAD
- Adobe Photoshop CC
- Adobe After Effects CC
- Adobe Media Encoder
- QuickTime 7

Supplemental
- None

Technology Requirements
- Two-monitor setup (ONLINE students only)
- 3 Button Mouse (REQUIRED)
- Maya System Requirements (You can find there [here](#))

Course Schedule

This schedule is only a guide and is subject to change. Unless otherwise indicated, assignments and readings are due the day they are listed on the syllabus, not the following day.

Week	Subject	Assignment Quizzes	Assignments Due
1	Overview of course and objectives Overview of materials and software • Project formats and naming conventions	Download all applicable software and become familiar with course, format, projects, and naming conventions.	
2	Foundational terms and intro to 3D animation Introduction to the Animation Production Pipeline Introduction to Maya • Maya 2022 GUI • Navigating the viewport • Primitive objects • Basic 3D transforms • Creating basic key frames • Setting up project folders	Quiz: Course Orientation	
3	Review: Basics of Maya • Navigating orthographic and perspective views/ using keyboard shortcuts • Scene organization utilizing the Outliner • Components of polygons • Soft selection	Project 1: Primitive Landscape Animation	
4	Review: Basics of Maya Part II Modeling in Maya • Smooth mesh preview • Parenting • Mesh tools • Modeling workflow • Creating image planes • Topology	Project 2: Modeling Utilizing Photo References Quiz: Digital Animation & Maya Basics	Project 1: Primitive Landscape Animation
5	Review: Modeling in Maya Basics of Texturing I: UVs • Review project folders • Materials overview • Unwrapping UVs • UV tools Cutting & Sewing UV edges	Project 3: UV Mapping/Texturing/Lighting/Rendering	
6	Review: Unwrapping UVs Basics of Texturing II:		Project 2: Modeling

	Materials ● Exporting UVs ● Painting in Photoshop ● Creating seamless textures ● More UV Tools Intro to lights and rendering	Quiz: UV Mapping & The UV Editor	Utilizing Photo References
7	Review: Materials and Texturing Non-Linear Deformers Setting up a render in Maya ● 3 Point Lighting ● Linear Workflow ● Color Management ● Applying a bump map Rendering with Arnold	Quiz: Texturing & Materials	
8	Review: Lighting and Rendering Final Project Overview History of animation The 12 Principles of Animation Animating a bouncing ball ● Intro to animation rigs ● Studying film reference ● Utilizing the Graph Editor Graph editor tangents	Project 4: Bouncing Ball in Maya	Project 3: UV Mapping/Texturing/Lighting/Rendering
9	Review: Bouncing Ball Character Animation Part I ● Pre-rigged character overview ● Walk cycle (Legs and Lower Body) ● Advanced character controls ● File referencing Copying and pasting animation curves	Project 5: Character Walk Cycle Final Project Proposal	Project 4: Bouncing Ball in Maya
10	Review: Character Walk Cycle (Legs) Character Animation Part II ● Adding personality to characters ● Walk cycle (upper body) Editing the graph editor	Quiz: The 12 Principles of Animation/History or Animation/Norman Rig Overview	Final Project Proposal
11	Review: Character Walk Cycle/Locomotion Character Animation in Maya Part III ● Using character constraints ● Implementing reference footage Demonstrating weight	Final Project Progress (Part I)	Project 5: Character Walk Cycle

12	Review: Unwrapping UVs
	Basics of Texturing II:
	Materials
	    ● Exporting UVs
	    ● Painting in Photoshop
	    ● Creating seamless textures
	    ● More UV Tools
	Intro to lights and rendering
		Project 6: Lip Sync Animation
		Quiz: Norman Pose Exercise
			Final Project Progress (Part I)

13	Review: Lip Sync Animation ● Review scene lighting Rendering image sequences	Final Project Progress (Part II)	Project 6: Lip Sync Animation

14	Review: Final Project Progress
	    ● Camera animation
	    ● Postproduction in AE
	    ● Work on final project
	Final project feedback
		FINAL PROJECT	Final Project Progress (Part II)

15	Review: Final Project
	    • Review rendering and postproduction
	    • Final project feedback
	Implementing sound and backgrounds in AE		

16	Review finished animation (playblast) for final project		Final Project Progress (Part III) FINAL PROJECT

Grading Criteria

Assignment / Assessment	Total Points	% of Grade
Participation – Participation includes student discussion posts and peer reviews. Discussions require students to submit a response to the original post's question, as well as respond to two other student's responses. Peer reviews will be assigned for each weekly assignment.	100	10
Weekly Assignments – Weekly assignments are generally due at the end of the week unless otherwise stated. Students will have a one-hour grace period beyond the deadline to help mitigate network issues. This grace period is used at the instructor's discretion. If students overuse this policy, it may be rescinded. Assignments turned in late will receive a 10-point deduction per day after the deadline. The maximum time an assignment can be turned in late is 3 days. It is up to students to proactively communicate with the instructor about any issues they	100	40

are having about meeting assignment deadlines.		
Quizzes – Course knowledge will be assessed through quizzes. Quizzes will follow the same late policy as the Weekly Assignments (10-points deduction every day, maximum of 3 days).	100	10
Final Project Prep – The final project will have 4 separate assessment points to track the development of the final project. These assessment points are opportunities for students to break the final project down into manageable sections and receive feedback before the final is due.	100	10
Final Project – It is expected that in this final project, students create projects that reflect dedicated effort. The final project consists of multiple stages, with various weights. This is a single submission based on all of the completed work from the Final Project Prep checkpoints. This cannot be turned in late.	100	30

Grading Scale

Letter Grade	% Equivalency
A	94 – 100%
A-	90 – 93%
B+	87 – 89%
B	84 – 86%
B-	80 – 83%
C+	77 – 79%
C	74 – 76%
C-	70 – 73%
D+	67 – 69%
D	64 – 66%
D-	60 – 63%
E, I, NG, S-U, WF	0 – 59%

More information on grades and grading policies is here: https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/

Materials, Supply, and Equipment Fees
Material and supply and equipment use fee information are available from the academic departments or from the schedule of courses (Florida Statutes 1009.24). The total course fee for this class is $0.00. The total course fee for each course is listed on the UF Schedule of Courses. (https://registrar.ufl.edu/soc/)

Course Policies

Attendance Policy, Class Expectations, and Make-Up Policy
The instructor is responsible for communicating the specific details of what percentage of your grade (if any) will be assigned to participation, and how class participation will be measured and graded. The UF Digital Worlds Institute is committed to the idea that regular student engagement is essential to successful scholastic achievement. No matter if the class is held in a traditional classroom, an online classroom, or a combination of the two, interaction with your peers and the instructor will empower you to greater achievement.

In this course, attendance will primarily be covered with the use of discussions and peer reviews (The "Participation" category found in the grading criteria). Weekly discussions will be made available via the canvas shell for you to complete, requiring you to respond to the discussion's initial question, as well as respond to at least two other student's responses. Initial posts are initially due Thursday on the week they are opened, and the student responses are due the following Sunday. Peer reviews will also be made available after each project listed in the course schedule; you will review two student's project submissions and given appropriate feedback for the provided assignment. Peer reviews will be due within a week of the specified assignment.

Students may only participate in classes if they are registered officially or approved to audit with evidence of having paid audit fees. The Office of the University Registrar provides official class rolls to instructors.

Students are responsible for satisfying all academic objectives as defined by the instructor. Absences count from the first-class meeting.

Acceptable reasons for absence from or failure to engage in class include illness; Title IX-related situations; serious accidents or emergencies affecting the student, their roommates, or their family; special curricular requirements (e.g., judging trips, field trips, professional conferences); military obligation; severe weather conditions that prevent class participation; religious holidays; participation in official university activities (e.g., music performances, athletic competition, debate); and court-imposed legal obligations (e.g., jury duty or subpoena). Other reasons (e.g., a job interview or club activity) may be deemed acceptable if approved by the instructor.

For all planned absences, a student in a situation that allows an excused absence from a class, or any required class activity must inform the instructor as early as possible prior to the class. For all unplanned absences because of accidents or emergency situations, students should contact their instructor as soon as conditions permit.

Students shall be permitted a reasonable amount of time to make up the material or activities covered during absence from class or inability to engage in class activities because of the reasons outlined above.

If a student does not participate in at least one of the first two class meetings of a course or laboratory in which they are registered, and they have not contacted the department to indicate their intent, the student can be dropped from the course. Students must not assume that they will be dropped, however. The department will notify students if they have been dropped from a course or laboratory.

The university recognizes the right of the instructor to make attendance mandatory and require documentation for absences (except for religious holidays), missed work, or inability to fully engage in class. After due warning, an instructor can prohibit further attendance and subsequently assign a failing grade for excessive absences.
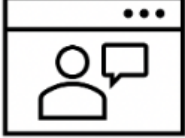
Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at: https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx

Course Modality
Course modality is the way in which a class is offered/delivered to students by the instructor. All students, regardless of the modality, will achieve the same learning objectives. Students can check their class schedules or reference the top of this syllabus to see the format(s) available for each of their individual classes. The modality of a course does not vary during a semester, and students are expected to adhere to the instructor-defined attendance guidelines for that format. Use the guide below to familiarize yourself with the various ways classes are offered at the Digital Worlds Institute.

This course is an **Online Asynchronous** modality. See chart below.

Know Your Course Modality

Face-to-Face (F2F)	Online Asynchronous (OA)	Online Synchronous (OS)
Students attend class F2F in a classroom. Class sessions may be recorded for students to view later.	Students watch the posted recording of the class session or studio recording online at their convenience.	Students participate in a class in real-time through Zoom.
Hybrid refers to a course that is partially Face-to-Face (F2F) and Online Asynchronous (OA)		
In a **HyFlex Model**, students have the flexibility of moving across all three modalities as needed or desired.		

Course Technology

The students will be required to have access to and use a personal computer with access to the Internet. Word editing software will be required for written assignments.

The University of Florida and Digital Worlds requires that students have access to and ongoing use of a laptop/mobile computer for DIG courses in order to be able to function in the current learning environment. Digital Worlds requires each DAS major's laptop computer to meet certain minimum specs for heavy graphics use, the requirements documented below must be met. https://digitalworlds.ufl.edu/programs/ba-in-digital-arts-sciences/technology-requirements/.

Course Communications

Students can communicate directly with the instructor regarding the course material through the course management system (CANVAS) using "Canvas E-Mail".

Course Recordings

Class sessions may be audio-visually recorded for students to refer back and for enrolled students who are unable to attend live. Students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live. The chat will not be recorded or shared. As in all courses, unauthorized recording and unauthorized sharing of recorded materials is prohibited.

Creation of Original Content Ethics

For original projects and all assignment deliverables, students should remember that representations of acts of violence, coarse and offensive language, sexual behavior, bodily function and ability, neurodiversity, and personal identity are likely to cause extreme audience response, regardless of the creator's intentions. In addition, the recreation of such actions and subjects for fictional purposes may unintentionally traumatize or negatively impact those who collaborate in the creation of the images. While the university encourages students to explore themes and tell stories that may include this difficult subject matter, they should be cautioned against modes or styles of representation that might be considered unnecessarily offensive or potentially triggering. Instructors, faculty, and university administrators reserve the right to not show or share any student work they feel is inappropriate for their classroom or for public exhibition, as

there may be concerns about the impact of such work on the community. Please consult with the faculty when producing work that might be considered controversial, and to err on the side of being cautious when it comes to making decisions about a project's content - in other words, make the PG-13 version of your story, not the R version, and certainly not the "unrated" version. This is also to help students understand that most professional creative situations have strict guidelines and limitations on such content and how it is produced: your ability to tell stories effectively with "less" is a strong professional skill that will aid in the dissemination of your work to a broader audience.

Unless otherwise explicitly approved in a course assignment, it is assumed that all work will be originally created and authored by the student without aid from other individuals, Artificial Intelligence (AI) platforms, Generative image features built into software, or Large Language Models LLMs. The instructor reserves the right at all times to ask about your work, the process you took to create your work, and for you to demonstrate or show the process you took towards creating your work. Please reach out to your instructor if you have any questions about if a specific technology you are using may fall into this category of plagiarism.

Please also keep in mind these following examples of plagiarism concern digital arts projects:

- Students are not permitted to submit works from a previous semester of this course (regardless of the successful completion of those projects in that previous semester) unless given explicit permission by the instructor.
- Students are not permitted to submit any work created by any software outside of the approved software for this course unless given explicit permission by the instructor.
- Students are not permitted to submit any work completed in a previous or concurrent course for assignments in this course regardless of the type of work created. Additionally, students may not use work created in this course for assignments in any other course without the explicit permission of the instructors of both courses.
- Students are not permitted to use (in whole or part) story ideas, character identities, marketing materials, animation, live action footage, audio, or any other materials created for another production unless given explicit permission by the instructor. This includes productions that the students themselves have participated in.

Student plagiarism will not be tolerated throughout the lifetime of this course. Any and all recognized violations will be automatically filed to the SCCR, and the violating student will be contacted by the course instructor. Further information can be found in the "University Honesty Policy" section of the syllabus, as well as the Student Honor Code and Student Conduct Code.

Course Technology Support

UF Computing Help Desk
For support related to account services, technical consulting, mobile device services, software services, administrative support, application support center, and learning support services, please contact the UF Computing Help Desk available 24 hours a day, 7 days a week at 352-392-4357 or helpdesk@ufl.edu.

University Policies

University Honesty Policy
Information about university-wide policies and resources can be found here:
https://syllabus.ufl.edu/syllabus-policy/uf-syllabus-policy-links/

UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Conduct Code specifies a number of behaviors that are in violation of this code and the possible sanctions. See the UF Conduct Code website for more information. If you have any questions or concerns, please consult with the instructor or TAs in this class.

Class Demeanor

Students are expected to arrive to class on time and behave in a manner that is respectful to the instructor and to fellow students. Please avoid the use of cell phones and restrict eating to outside of the classroom. Opinions held by other students should be respected in discussion, and conversations that do not contribute to the discussion should be held at minimum, if at all.

Students Requiring Accommodations

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center by visiting https://disability.ufl.edu/students/get-started/. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

Netiquette Communication Courtesy

All members of the class are expected to follow rules of common courtesy in all email messages, threaded discussions and chats, more information can be found at: http://teach.ufl.edu/wp-content/uploads/2012/08/NetiquetteGuideforOnlineCourses.pdf

Software Use

All faculty, staff, and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

Student Privacy

There are federal laws protecting your privacy with regards to grades earned in courses and on individual assignments. For more information, please see: https://catalog.ufl.edu/UGRD/academic-regulations/ferpa-confidentiality-student-records/

Course Evaluation

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at https://gatorevals.aa.ufl.edu/students/. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via https://ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at https://gatorevals.aa.ufl.edu/public-results/

Campus and Academic Resources

U Matter, We Care: If you or someone you know is in distress, please contact umatter@ufl.edu, 352-392-1575, or visit U Matter, We Care website to refer or report a concern and a team member will reach out to the student in distress.

Counseling and Wellness Center: Visit the Counseling and Wellness Center website or call 352-392-1575 for information on crisis services as well as non-crisis services.

Student Health Care Center: Call 352-392-1161 for 24/7 information to help you find the care you need, or visit the Student Health Care Center website.

University Police Department: Visit UF Police Department website or call 352-392-1111 (or 9-1-1 for emergencies).

UF Health Shands Emergency Room / Trauma Center: For immediate medical care call 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32608; Visit the UF Health Emergency Room and Trauma Center website.

E-learning technical support: Contact the UF Computing Help Desk at 352-392-4357 or via e-mail at helpdesk@ufl.edu.

Career Connections Center: Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services.

Library Support: Various ways to receive assistance with respect to using the libraries or finding resources.

Teaching Center: Broward Hall, 352-392-2010 or to make an appointment 352- 392-6420. General study skills and tutoring.

Writing Studio: 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers.

Student Complaints On-Campus: Visit the Student Honor Code and Student Conduct Code webpage for more information.

Online Students Complaints: View the Distance Learning Student Complaint Process.

Disclaimer: This syllabus represents the instructor's current plans and objectives. As we go through the semester, those plans may need to change to enhance the class learning opportunity. Such changes, communicated clearly, are not unusual and should be expected.