ART 4401: Computer Animation

ART 4401-0020	Spring 2021
Days & Time	Tues/Thur 3:55PM–6:40PM
Location	Hopkins Hall 156
Virtual Meetings	Zoom Link (Pass: 4401)
Instructors	Dalena Tran— tran.878@osu.edu Hirad Sab— sab.1@osu.edu
Office Hours	By appointment
Communication	Discord Server
Website	hsab.github.io/art4401
Syllabus	Download PDF
Recorded Lectures	4401: Computer Animation Playlist

Note: Texts in color are clickable links

Catalog Description

Focus on the concepts, aesthetics, processes, and practice of designing and producing 3D computer animation. Theory and techniques of cinematography, video production and sound as related to 3D computer animation will be covered.

Course Learning Objectives

This course is an introduction and integration of traditional design tools, camera, and digital technologies for application to multidisciplinary visual thinking, design, communication, and art. Throughout the semester, we will examine the language and histories of 3D animation and how artists have contributed to and utilized them in their work. We will explore, compare, and contrast industry-standard/normative approaches with radical/experimental takes of these various media. Our aim is to establish a rich understanding of the complex and evolving environment in which artists and designers have been creating 3D animation. Students will explore technical, critical, and creative tools to realize animation projects and to gain a deeper understanding of digital moving images as a medium of expression and communication.

Through a series of exercises, projects, readings, and screenings, we will explore and study the following:

- Principles of 3D animation: timing, perspective, change, and aesthetics.
- Fundamentals of motion and animation: attributes, keyframes, interpolation, and blending.
- Fundamentals of digital video files: codecs, resolution, raster/vector, and conversion.
- Means of exhibition and presentation: screening, immersive environment, web-based, and projection mapping
- Principles of cinematography, video production, motion graphics & audio with 3D computer animation
- Techniques of 3D animation: rigging, procedural, dynamic, and simulation animations

We will explore the field through lectures, readings, screenings, discussions, and student presentations. By the end of the semester, students should have gained essential production and postproduction skills as well as a good understanding of the key concepts relevant to contemporary film, video, new media, installation, and 3D animation.

Health and Safety Requirements

All students, faculty and staff are required to comply with and stay up to date on all university safety and health guidance, which includes wearing a face mask in any indoor space and maintaining a safe physical distance at all times. Non-compliance will be warned first and disciplinary actions will be taken for repeated offenses.

Format & Delivery

This is a hands-on, process-oriented studio. It is comprised of presentations, assignments, participatory activities and exercises, individual and group discussions, and reviews. This course is hybrid or in-person. Synchronous Zoom meetings will be used for the introduction of assignments, some demonstrations, breakout group meetings, and group critique discussions. Other activities such as working on assignments and exercises, viewing videos, and reading assignments will be executed synchronously and asynchronously. In-person activities will include demonstrations, presentations, group exercises, and critiques. Weekly announcements will serve to inform when activities will take place.

Departmental Note: A hybrid course provides online learning opportunities for up to 74% of the semester. That means that up to three-fourths of your in-class meeting time may occur at a distance with the expectation that your full attention will be given to this course during the scheduled two hour and forty minute long meeting times, regardless if you are meeting physically or otherwise.

Attendance

Each unexcused absence (beyong the allowed three) will result in one full letter grade deduction (e.g. B+ to C+). Six unexcused absences (20% of the semester) results in a failed grade. If there is an emergency and you must miss class, contact us beforehand. Absences will not be excused after the fact except in extreme circumstances. Illness requires a doctor's note. If you are more than 10 minutes late, you will be marked tardy. Three tardies result in one unexcused absence. Any disputes should be discussed within two weeks.

Departmental Note: The Department of Art acknowledges that illness, family obligations, and other conflicts with your classes do occur from time to time and up to three absences are allowed for any reason during the semester without penalty. All absences from class will be counted, however, and in the instance that you miss three class meetings, you are required to meet us to discuss strategies for avoiding additional absences.

Departmental Note: It has been determined that some in-person learning is necessary for you to successfully engage your instructor and peers, course activities, and to meet learning objectives. Timely and consistent contributions are critical in all formats used to deliver the content of this course. In the instance of class-wide quarantine or campus closure, a course contingency plan has been designed so that we can transition to an exclusively on-line format if we are required to actuate one. Attendance will be taken regardless of delivery format.

Participation

Attendance, productive class activity and meeting in-progress deadlines are factors in the assessment of your progress. You are expected to be present and active for the entire class period. Participation is critical to passing and enjoying this class. Do the work, share your thoughts, ask questions, prepare for class meetings and discussions, offer feedback during critiques. This class is meant to be a safe space in which you feel encouraged and supported in learning and taking creative risks. This means being aware and considerate of different backgrounds, perspectives, and identities. Respect each other and this space we are building together. Don't assume, ask. Remain open, be willing to take responsibility, apologize, and learn. Help each other in this. If you have concerns, please let us know.

Communication

Discord is used as our primary mode of communication. You are required to signup for an account, join our server, and keep up to date with announcements and group discussions. Discord is also used to organize resources, readings, screenings, and learning materials. Here, you will also submit your assignments.

Discord Server Interaction

Ongoing weekly discussions and participation in the Discord server is required. We will use Discord to gather and share resources, respond to readings and peers' works, and to share your work in progress.

Throughout the semester students will submit a variety of posts to our Discord server, among them:

- Responses to readings in text, rendered stills, sketches, or animation.
- Exercise submissions as .blend files, video links (uploaded to Youtube or Vimeo), rendered stills, etc.
- Project proposals in PDF format or as Word documents.

Readings & Discussions

During the semester, you will be assigned readings on a variety of topics. The readings are intended to familiarize you with some of the relevant discussions that relate to the field. We will discuss our findings and thoughts with our peers in class. Your participation in these discussions matters. The discussions serve as a dialectical engagement to learn from one another and explore the readings in conversation. Moreover, the readings serve as a foundation for discussing the screenings, which are purposefully picked to convey some of the ideas from the readings in practice.

Projects

Projects are due at the start of class on the date assigned. Projects may be turned in up to one week late for a one letter grade deduction off the project grade. Work that is more than one week late will not be accepted. If you are absent, you are still expected to turn in projects online by the deadline. Extra time will not be given for work lost due to save issues, software errors, computer crash, etc. You should regularly backup your files on your desktop, online, and/or on an external harddrive or USB stick in case your computer is lost.

Grading

There are 100 possible points, distributed across participation, attendance, exercises, and projects. There are 8 additional extra credit points available through challenges. Individual works will be assessed according to assignment objectives, effort and quality of in-class and online or distance activities, vigor of exploration and research initiative, participation in reviews and discussions, and ability to adapt.

Participation & Interaction: 20 pts
Exercises: 30 pts
Project 1: 20 pts
Project 2: 30 pts
Total: 100 pts
Extra credit: 8 pts (from challenges)

Late Assignments

If you miss deadlines due to valid, extenuating circumstances you may submit the required work at a date agreed upon with us. Please contact us to discuss modifying the deadline prior to the original deadline.

Grading Scale

A	(93 - 100)	Work, initiative, and participation of exceptional quality
A-	(90 - 92)	Work, initiative and participation of very high quality
B+	(87 - 89)	Work, initiative and participation of high quality
B	(83 - 86)	Very good work, initiative and participation
B-	(80 - 82)	Slightly above average work, initiative and participation
C+	(77 - 79)	Average work, initiative and participation
C	(73 - 76)	Adequate work; less than average level of initiative and participation
C-	(70 - 72)	Passing but below good academic standing; less than average level
D+	(67 - 69)	Below average work, initiative and participation
D	(60 - 66)	Well below average work, initiative and participation
E	(59.9 - 0)	Unsuccessful completion of work. Limited or no participation.

Course Technology

- Basic computer and web-browsing skills
- Navigating Carmen: for questions about specific functionality, see the Canvas Student Guide.
- CarmenZoom Virtrual Meetings
- Discord usage and interaction skills

Required Equipment

- Computer: OS X, Windows 7+, or Linux with internet connection for CarmenZoom
- Minimum Hardware Requirements:
  - 64-bit quad core CPU
  - 16 GB RAM
  - Full HD display
  - Drawing tablet (Recommended)
  - Graphics card with 4 GB RAM
- **3-button mouse (left, right, clickable wheel)**
  - **IMPORTANT:** This is a non-negotiable requirement. You can purchase a nice gaming mouse for less than $20 from the link above. Devices such as Apple Mouse, Magic Mouse, Magic Trackpad, and Touchpads are **not acceptable**. These devices will only slow you down while learning and working with the software.
- Webcam
- Microphone
- A mobile device (smartphone or tablet) or landline to use for BuckeyePass authentication

Course Materials and Tools

Our course heavily relies on free, open-source, and libre software. Throughout the semester we will explore modeling, rendering, and animation primarily using Blender, while also discussing other established and emerging software such as Adobe After Effects, Unreal Engine, Unity, and DAZ, among others. Blender provides a powerful arsenal of tools that enables advanced 2D and 3D exploration, animation, video editing, and compositing among others. Students that are already familiar with other 3D suites such as Cinema4D and Maya are ecnouraged to use their software of choice. Although Unity and Unreal Engine are game engines, if you are comfortable in producing 3D animation work with these engines you are more than encouraged to do so.

You are required to signup for an account on Sketchfab, an online 3D model sharing platform. Here you will post your animated 3D models and scenes for assessment and dissemination among your peers. Sketchfab can also be used as an AR platform for personal and semester-long projects.

Discord is used as our primary mode of communication. You are required to signup for an account, join our server, and keep up to date with announcements and group discussions. Discord is also used to organize resources, readings, screenings, and learning materials. Here, you will also submit your assignments.

You are required to signup for YouTube or Vimeo. These platform are used to share your 3D animations in video format.

All required readings and screenings will be posted on our Discord server. There is no required book for this class. We will coordinate and discuss with the department the possibilitites of lab computer use. However, given our current post-COVID reality, this course is structured such that projects and exercises can be completed with consumer-grade PCs and laptops.

Projects

In light of the pandemic and its imposed limitations regarding space, fabrication, and occupying space, the projects have been designed to permit engagement with the concepts and tools of this course without compromising your physical and mental health, your peers', families', and faculties'. To this end, those interested can use their preferred software, be it Cinema4D or game engines such as Unity and Unreal Engine, as well as other familiar software to explore and engage with this class. Although this course is primarily built around Blender, students are free to use their DCC of choice to fulfill the requirements of projects and assignments. However, do note that all of our activities, readings, assignments, and the course in general, are structured so that your efforts throughout the semester build towards your first and ultimately final project.

Project 1: Meta Imaginaries

The term *xenomorph* originates from the Greek *xeno-* meaning "other" or "strange" and *-morph* which translates to "shape". Although the term has been used extensively in popular culture and science fiction, here, it functions in its literal meaning, "other-form". The idea behind this project came from Netflix's series Alien Worlds: a heavily CGI docufiction that speculates on the possibilities of extraterrestrial "otherness." And similarly, for this project, you are tasked to imagine an otherworldly creature and its habitat.

Our work during the first five weeks of class culminates in the realization of this project. Your weekly exercises, challenges, readings, and discussions are designed to help you navigate and develop your projects. These activities not only satisfy their own requirements as individual assignments but also feed the progress towards completing Project 1. During this time, we will model/sculpt our xenomorphs, add materials and textures to them, build engaging environments and habitats for these creatures with control over lighting, and finally bring them to life by animating and rigging these characters. These activities not only push you forward in learning the techniques and standards of the software but also build up towards your Project 1. Week 6 is then dedicated to studio sessions where you can explore and enhance different aspects of your project before you submit them on Week 7.

Details:

- Animation length of at least 1 minute
- Use of multiple cameras/shots
- Animated lighting and camera work
- Animated character and creature building
- Shaded worlds and objects
- Kitbashed and constructed environments
- Affective, provocative, and capable of evoking emotions/feelings in the viewer

Project 2: Xenoorbis

Your final project is a continuation and condensation of the techniques, concepts, and theories discussed in the class. Other than a few technical requirements, you are in full control of every aspect of your project. You are free to use any software/technique that you find appropriate for realizing your work. Your final piece is a 2-3 minute animation that uses xenomorphs and environments built and shared by your peers to create a xenoorbis: other-worlds.

You are responsible for the ideation, conceptualization, and execution of your work. Extra credit is given to those whose concepts relate to the readings or relevant contemporary issues. You must be able to discuss and contextualize your idea. In other words, you need to be able to discuss and justify your ideas appropriately. Moreover, the format of your work is also determined by you and can fall within or outside any of the following categories: Non-photorealistic Animation (3D, 2.5D), 3D Animation, Mixed Media Collage, and Experimental Animation among others.

Details & Requirements:

- **Length & Format:**
  - 2-3 minute

  - Minimum of 4 different shots/scenes
  - Export Settings: H.264 Codec | High Quality Profile | MP4 or MKV (Matroska) file format
  - Note: Render your projects as an image sequence for resumable renders and extra control.
  - Aspect ratio can be selected by you. Recommended: 2.35:1, 16:9, 4:3, 3:2, 1:1
- **Constructed in 3D Environment:** This point might seem confusing or vague. However, it simply implies that your work needs to be conceived and realized in a 3D space/software. Regardless of your chosen format, style, or form of narrative, you are required to construct your animation works such that you utilize depth in addition to the length and height of your image. Below are some examples of this idea in action:
  - **2.5D Animation and Non-photorealistic Rendering**: [1], [2], [3],
  - **3D Animation**: [1], [2], [3],
  - **Mixed Media & Collage**: [1], [2], [3], [4]
  - **Experimental & Abstract**: [1], [2], [3],
- **Sound & Audio**: You are required to approach sound creatively and critically. Explore and experiment with the free sound resources that are posted on this website and our Discord server. We encourage you to explore and use your own field recordings. Experiment with layering and designing your own audio. Creative and excellent sound work will be recognized and rewarded.
- **Quality and Effort:** Throughout the semester, we have discussed a wide array of techniques, approaches, topics, and theories related to image-making and animation. Demonstrate your understanding and engagement with this material:
  - Demonstrate animation techniques for lighting, materials, and objects
  - Demonstrate an understanding of keyframes, interpolation, and extrapolation and their appropriate use for different needs
  - Demonstrate an understanding of the used software and its affordances
  - Demonstrate your engagement with the readings and critical discussions
  - Demonstrate your understanding of the discussed theories and critical texts
- **Techniques and Approaches:** Your projects are required to demonstrate your abilities in **at least 6** of the following categories:
  - **Worldbuilding and Kitbashing:** Megascans, 3D scans, stylized and non-stylized models, kitbashing.
  - **Cinematography:** Camera animation, scene construction, pacing, and editing.
  - **Rigging and Skeletal Animation:** Use of rigging and skeletal animation for characters and objects.
  - **Materials & Shading:** Demonstrate abilities in material creation, shading, and texturing.
  - **Non-moving Animation:** Demonstrate knowledge of animation for non-moving objects, such as lights, materials, and surfaces.
  - **Composting and Post-Production:** Use of post-processing and compositing for effects and colorgrading.
  - **Motion Tracking and VFX:** Mixing of live footage with 3D/2D. Use of photography and video to drive 3D animation. Hybrid video and 3D work.
  - **2.5D and NPR:** Use of 2.5D techniques to realize 2D, NPR, and anime-style animation.
  - **Sound & Audio Reactiveness:** Sound driven visuals, effects, and occurrences.
  - **Physics and Simulation:** Use of particle systems, fluid, smoke, rigid body, or soft body simulation among others.
  - **Procedural Animation & Modifiers:** Use of modifiers and procedural means for object generation and animation.

Calendar

Tentative schedule. Subject to change based on student progress, health and safety policies, discourse, engagement, and demand.

Weeks	Program
Week 1 01/12—01/14	• **Introduction** – Introduction & Discussion – Claim Forms, Computer & Door Access – Syllabus Overview – Logistics & Communication – Workshop • **Logistics (Responses Due Thur, 01/14)** – Complete Class Survey – Fill Out Claims Form Upload the completed form here as Lastname-Firstname.pdf • **Presentation: Introduction (In-class Thur, 01/14)** Create a 5 minutes long presentation about yourself. This should include your previous works, expertise, and how/where you want to move forward in your career and practice. If you don't feel comfortable sharing your projects, instead include up to 3 works that interest you conceptually, technically, and aesthetically. Your presentations must be made with Google Slides. Make sure it is shared with public access rights and share this public link in our Discord server under **Exercises➔#presentations** • **Challenge: Blender Fundamentals (Due Sun, 01/17)** Your first challenge is aimed at familiarizing yourself with the software and putting into practice some of the techniques and skills that you learn along the way. For this challenge you are to watch Blender Fundamentals. Try to watch as many of these videos as you can. They serve as a perfect entry point to understand the Blender's capabilities. After you are done watching these videos, create a 10 seconds piece of animation at 24fps. Your animation requires keyframing the translation, rotation, and scale of a primitive object (e.g. a cube or sphere). Anything beyond this is optional, but it would be nice to see your object shiny and nice looking . Render your video as a 1080p .mp4 file and submit to our Discord server under **Challenges➔challenge-1**
Week 2 01/19—01/21	• **Workshops:** Software, Interface, Interaction, Modeling, Sculpting, Modifiers • **Exercise: Blender UI (Due Sun, 01/24)** Open a new blender project and try to replicate the layout and workspaces of this example blend file as closely as possible (tip: you can open multiple instances of Blender at the same time). Ensure that you recreate the proper *workspaces* using the appropriate *editors*. You might find this tutorial helpful in completing this exercise. Submit your resulting blend file to **Exercises➔exercise-1** • **Exercise: Creature Modeling/Sculpting (Due Sun, 01/24)** Submit 3 renders of your creature based on your progress during the workshops and another additional 3 renders based on the changes that you have made to your model outside of class. In 4-5 sentences describe the characterisitcs of your creature. Your renders need to be made from frontal, top, and side views. Submit your 6 rendered images to **Exercises➔exercise-2** • **Screenings/Artists** – *Goodbye Uncanny Valley*, Alan Warburton. – 12 Principles of Animation – *Virtual Embalming*, Frederik Heyman Trigger Warning: Contains scenes depicting nudity and rope bondage. • **Resources:** – Blender Fundamentals – Fundamentals of 3D Mesh Modeling in Blender (Course) – Fundamentals of Digital Sculpting with Blender (Course)

Week 3 01/26—01/28	• **Workshops:** Materials, Environment Building, Kitbashing, Lighting, Rendering • **Prepare: Alien Worlds (In-class Tues, 01/26)** Watch one or more episodes of Alien Worlds and use this experience as a guiding force in conceptualizing and approaching your Project 1. Submit 3 rough sketches — with your preferred medium — for distinct creatures that you might want to pursue during the semester. Submit to **Projects➔#creature-sketches** • **Prepare: Megascan Access (Due Tues, 01/26)** Follow the guide on **General➔#resources** to prepare you account for Megascans with unlimited access. • **Proposal: Semester-long Project (Due Thur, 01/28)** This assignment only applies to those who are repeating this course for a second time. If this is the first time you are taking 4401, this is NOT you! Moreover, if you are repeating this course and want to follow the standard syllabus this does not apply to you either. For repeating students who are pursuing a semester-long project, you must submit a proposal outlining your plan, concepts, ideas, and software. Your proposal must include: – 500-word description of your idea and concept – Include the approximate length of your animation. – Rough timeline of deliverables and development plan for the next 13 weeks. – A detailed storyboard, if your project is narrative work, or a mood board if your project does not follow conventional linear storytelling and narratives. – A list of artists whose work you find inspiring in realizing your own project. These can be curated based on aesthetics, technique, software, and/or concept. – List of the software you are using and how you plan to use them. Submit your proposal as a PDF file under **Proposals➔#extended-projects**. **Note:** As you progress through your project, we understand that things change. Creative work is "part accident, part intention". This proposal enables us to better assist you in realizing your project and to follow and track your progress along the way. It is not a binding contract, so don't worry if things change. • **Exercise: 3D Forage (Due Sun, 01/31)** Submit 3 renders of your environment and the creature placed within it based on your progress during the workshops and an additional 3 renders based on the changes that you have made to your model outside of class. If you are using resources outside of Megascans credit them appropriately. Submit your 6 rendered images to **Exercises➔exercise-3** • **Screenings/Artists** – *Regular Division*, Joe Hamilton – *BREATHE DEEP*, Katie Torn – *insight*, Kim Laughton • **Resources:** – *World Building in Blender*, Ian Hubert – Ian Hubert on Youtube – Quixel Bridge – Megascans Plugin for Blender – Sketchfab: 3D Foraging – Rhizome Artbase
Week 4 02/02—02/04	• **Workshops:** Motion, Keyframes, Attributes/Properties, Camera Animation, Constraints, Drivers, Basic Rigging with Rigify, Beginner Procedural Animation • **Prepare: Principles of Animation (Due Tues, 02/02)** Watch the following videos here and here. We will touch on these topics as we explore animation techniques and capabilities of Blender. • **Exercise: Early Animation (Due Sun, 02/07)** Submit a 15-second video demosntrating you efforts during this week's workshops as well as your explorations outside of the class. Your video can be rendered using "Rendered" view, "Material Preview", or "Viewport Render Animation". Upload your video to Youtube or Vimeo and post the link to **Exercises➔exercise-4**

Week 5 02/09—02/11	• **Workshops:** Rendering, EEVEE Optimization, Video Encoding Fundamentals • **Proposal: Project 1 (Response Due Tues, 02/09)** – **A 9-panel storyboard**: Your storyboard can be either hand-drawn, digital, or prototyped using 3D software. If time permits, explore a combination of these methods to push your sketches closer to your mental image. Your storyboard should plan for **a minimum of 1 minute of animation**. – **400-word written statement**: In your written response, explain your concept, creature, and the environment that you have in mind.How do you plan to execute future developments beyond what has already been accomplished in workshops and exercises. Example: "I'm creating an invertebrate creature in a futuristic technological dystopia...To achieve this my piece will primarily explore the creature as it navigates the space filled with electronic, gadgets, and trash..." – **References and mood board**: You should include a mood board (minimum 10 images/videos) in your proposal that that builds upon your existing creature and environment. Use these references to communicate your piece's mood, as well as materials and visual presentation. – **Sounds**: Submit a minimum of 5 audio pieces that convey the mood of your animation piece, creature, and environment. Include these as links in your PDF file. Submit your proposal as a PDF file under **Proposals→#project-1**. **Note:** As you progress through your project, we understand that things change. Creative work is "part accident, part intention". This proposal enables us to better assist you in realizing your project and to follow and track your progress along the way. It is not a binding contract, so don't worry if things change. • **Readings (Response Due Thur, 02/11)** – *Motion Pictures*, Patrick Nathan – **Prompt:** Would you define Project 1 as an attempt in photography or rather a cinematic experience? Does it navigate space in the tradition of cinema, a freezing of time as do photographs, or does it echo a moment in time indefinitely? Why? What do you predict for the future of narrative in the age of 15-second videos, Instagram, and TikTok? Respond with a minimum of 200 words. Submit your response to **Readings→reading-1** • **Screenings/Artists** – *still lost I guess, here's a tunnel...*, Darío Alva • **Resources:** How to Make a Storyboard
Week 6 02/16—02/18	• **Open Studio Week** • **Readings (Response Due Tues, 02/16)** – *Pragmatics of Studio Critique*, Judith Leeman (read pp. 181-190 up to "Remainders") – **Prompt:** How do you define critique? What do you think are the most impactful ways of critique based on the readings? Why would Leeman suggest to take the time to make "obvious, verifiable observations" about a piece of work? After reading Leeman's piece, how do you see the role of critique in your work or art practice? Leeman suggests how little trust the public has in their own experience of art viewing. "A person fully capable of noticing and responding to a tree outside a gallery crosses the threshold into the gallery and becomes suddenly unable to muster that same capacity facing a work of art." Would you agree with this claim? Please explain your reasoning. Respond in 200-300 words. Submit your response to **Readings→reading-2**. Your responses and contributions to the discussion will be used during the class as we collectively create a guiding document on to approach critique as a class.
Week 7 02/23—02/25	• **No Class Tues, 02/23- INSTRUCTIONAL BREAK** • Project 1 Online Exhibition • Project 1 Discussion & Critique • **Project 1 (Due Thur, 02/25)**

Week 8 03/02—03/04	• **Workshops:** Advanced Rigging, Advanced Materials, Audio Reactiveness, Advanced Drivers • **Readings (Response Due Tues, 03/02)** – *Ripping reality: Blind spots and wrecked data in 3D*, Hito Steyerl – **Prompt:** TBA. Submit your response to **Readings→reading-3**. • **Screenings/Artists:** – *Fluid Silhouettes*, Jesse Kanda – *Trauma Scene 1*, Jesse Kanda – *Dream Playthrough #3*, Sam Rolfes – *Ugly*, Nikita Diakur – *FLESH NEST*, Andrew Thomas Huang – *How Not to be Seen: A Fucking Didactic Educational .MOV File*, Hito Steyerl • **Challenge: Creature on fleek (Due Sun, 03/07)** Use the techniques covered during the week to improve the materials of your creature. Submit 3 renders from top, side, and front of your creature to our Discord server under **Challenges→challenge-2** • **Challenge: Creature on the move (Due Sun, 03/07)** Use the rigging techniques covered during this week to create a walk cycle or other *action* animations for your creature. Submit a short video of *each* action to **Challenges→challenge-3** • **Resources:** *Rig Anything with Rigify*, *Advanced Rigify Techniques*, Todor Nikolov
Week 9 03/09—03/11	• **Workshops:** Render Layers, Compositing, Video Editing, Motion Tracking • **Proposal: Project 2 (Response Due Tues, 03/09)** – **A 9-panel storyboard**: Your storyboard can be either hand-drawn, digital, or prototyped using 3D software. If time permits, explore a combination of these methods to push your sketches closer to your mental image. Your storyboard should plan for **a minimum of 1 minute of animation**. – **400-word written statement**: In your written response, explain your concept, creatures, and the environment that you have in mind. Explain the narrative arc of your animation project. How do you plan to execute future developments beyond what has already been accomplished? Which creatures will you use? How do they interact with one another? – **References and mood board**: You should include a mood board (minimum 10 images/videos) in your proposal that that builds upon your existing work. Use these references to communicate your piece's mood, as well as materials and visual presentation. – **Sounds**: Submit a minimum of 7 audio pieces that convey the mood and characterisitcs of your animation piece, creatures, and environment(s). Include these as links in your PDF file. Submit your proposal as a PDF file under **Proposals→#project-2**. • **Exercise: "Live Action" Creature (Due Sun, 03/14)** Place you creature in the motion tracked environment that we built during the workshops. Add additional elements to enhance, disrupt, or augment the existing environment from the video. Upload your video to Youtube or Vimeo and post the link to **Exercises→exercise-5** • **Challenge: Cool Shadows (Due Sun, 03/14)** Add realistic shadows to the exercise above. You can use Cycles a single shadow pass from Cycles, or use the complicated approach in EEVEE. If you do indeed complete this challenge, do not to resubmit the video, but simply post a still image that clearly shows your casted shadows to **Challenges→challenge-4**

Week 10 03/16—03/18	• **Workshops:** VFX in Blender (continued), 2D Animation and Grease Pencil, 2D-3D Hybrid Style, Mixed Collages in 3D Space • **Readings (Due on Tues, 03/16)** – *It's 2039, and Your Beloved Books Are Dead*, Alix E. Harrow – **Think about...** What is the ultimate form of narrative immersion? How do formats shape, describe, and prescribe the reality of their stories? Do these prescribed realities, like those in video games and movies, form a homogenous understanding of reality in contrast to books that leave the reader in charge of interpreting and imagining their reality? Submit your response to **Readings➜reading-4**. • **Screenings/Artists** Claudia Hart, Sophie Kahn, Marjan Moghaddam, Alfredo Salazar-Caro, Frederik Heyman, Cécile B. Evans • **Exercise: Project 2 Milestone (Due Sun, 03/21)** Submit your preliminary progress towards the creation of Project 2. This can be integrating the creatures in the same scene, designing/modifying the habitats of the creatures, improving the lighting, materials, or the animation of your creatures, or additionally animation of elements in the environment. Submit the appropriate documentation (video or stills) to **Exercises➜exercise-6** • **Challenge: Greasy Creature (Due Sun, 03/21)** Use the 2D/3D hybrid techniques learned this week to augment, complicate, and complement your creatures, environment, and style of your piece. Submit a still or video (if you prefer) to **Challenges➜challenge-5** • **Resources:** Rhizome Anthology, e-flux, NEWMEDIAART.EU
Week 11 03/23—03/25	• **Workshops:** VFX in Blender (continued), 2D Animation and Grease Pencil, 2D-3D Hybrid Style, Mixed Collages in 3D Space • **Readings (Due on Tues, 03/23)** – *It's 2039, and Your Beloved Books Are Dead*, Alix E. Harrow – **Think about...** What is the ultimate form of narrative immersion? How do formats shape, describe, and prescribe the reality of their stories? Do these prescribed realities, like those in video games and movies, form a homogenous understanding of reality in contrast to books that leave the reader in charge of interpreting and imagining their reality? Submit your response to **Readings➜reading-5**. • **Screenings/Artists** Claudia Hart, Sophie Kahn, Marjan Moghaddam, Alfredo Salazar-Caro, Frederik Heyman, Cécile B. Evans • **Exercise: Project 2 Milestone (Due Sun, 03/28)** For this exercise, you are to show progress made towards your Project 2. This exercise is not meant to show "*how much*" progress you have made, but to demonstrate that you are actively working towards your project 2. Submit proof of your prototypes, tests, kitbashing, lighting, camera work, **sound**, etc. These **must be submitted as a viewport render video that includes the sound**. Submit your video to **Exercises➜exercise-7** • **Challenge: Greasy Creature (Due Sun, 03/28)** Use the 2D/3D hybrid techniques learned this week to augment, complicate, and complement your creatures, environment, and style of your piece. Submit a still or video (if you prefer) to **Challenges➜challenge-6** • **Resources:** Rhizome Anthology, e-flux, NEWMEDIAART.EU

Week 12 03/30—04/01	• **Workshops:** Physics (Cloth, Particles, Fluids & Volumetrics) • **No Class Thur, 04/01- INSTRUCTIONAL BREAK** • **Exercise: Project 2 Milestone (Due Sun, 04/04)** For this exercise, you are to show progress made towards your Project 2. This exercise is not meant to show "*how much*" progress you have made, but to demonstrate that you are actively working towards your project 2. Submit proof of your prototypes, tests, kitbashing, lighting, camera work, **sound**, etc. These **must be submitted as a viewport render video that includes the sound**. Submit your video to **Exercises➔exercise-8** • **Challenge: Physics (Due Sun, 04/04)** Use the simulation techniques learned this week to augment, complicate, and complement your creatures, and environment. Submit a still or video (if you prefer) to **Challenges➔challenge-7** • **Screenings/Artists** – Sara Ludy – Ian Cheng – Bunny Rogers – Jennifer Steinkamp – TeamLab – Refik Anadol – *Box*, GMUNK – *Sweater*, Filip Sterckx – *Scintillation*, Xavier Chaissaing – *Discrete Figures*, ELEVENPLAY, Rhizomatiks Research, Kyle McDonald
Week 13 04/06—04/08	• **Open Studio Week** • **Exercise: Project 2 Milestone (Due Sun, 04/11)** For this exercise, you are to show progress made towards your Project 2. This exercise is not meant to show "*how much*" progress you have made, but to demonstrate that you are actively working towards your project 2. Submit proof of your prototypes, tests, kitbashing, lighting, camera work, **sound**, etc. These **must be submitted as a viewport render video that includes the sound**. Submit your video to **Exercises➔exercise-9** • **Challenge: Physics (Due Sun, 04/11)** Use the simulation techniques learned this week to augment, complicate, and complement your creatures, and environment. Submit a still or video (if you prefer) to **Challenges➔challenge-8**
Week 14 04/13—04/15	• **Open Studio Week** • **Exercise: Project 2 Milestone (Due Sun, 04/18)** For this exercise, you are to show progress made towards your Project 2. This exercise is not meant to show "*how much*" progress you have made, but to demonstrate that you are actively working towards your project 2. Submit proof of your prototypes, tests, kitbashing, lighting, camera work, **sound**, etc. These **must be submitted as a viewport render video that includes the sound**. Submit your video to **Exercises➔exercise-10**
Week 15 04/20—04/22	• Project 2 Online Exhibition • Project 2 Discussion & Critique • **Project 2 (Due Tues, 04/20)**
Week 16 04/27—04/29	• **Finals Week / No Class**

Department Notes & Campus Policies

Release of All Claims

Please completed, sign, and submit the Release of All Claims Form. In support of the educational activities within The Department of Art, certain equipment is provided which may be used by students, advisor and faculty which, if not used properly, can result in bodily injury to user. By signing the *Release of All Claims Form*, among other things, you certify that you have full knowledge and understanding of such risk, that you know how to use the equipment in a proper manner, and to follow all appropriate safety precautions. You also agree to take responsibility for leaving this equipment in the same condition in which it is found in order to ensure its ongoing safe operation. In consideration of being granted access to the use of the equipment provided by the Department of Art you assume full and complete responsibility for the use of such equipment for the period from August 25, 2020 to December 11, 2020.

Building Access

Building access for undergraduates begins **January 25th**. Undergraduates will have access to Hopkins Hall:

- **Mon-Thurs:** from 7am – 10pm
- **Fri:** from 7am – 6pm

Carmen Access

You will need to use BuckeyePass multi-factor authentication to access your courses in Carmen. To ensure that you are able to connect to Carmen at all times, it is recommended that you take the following steps:

- Register multiple devices in case something happens to your primary device. Visit the BuckeyePass - Adding a Device help article for step-by-step instructions.
- Request passcodes to keep as a backup authentication option. When you see the Duo login screen on your computer, click **Enter a Passcode** and then click the **Text me new codes** button that appears. This will text you ten passcodes good for 365 days that can each be used once.
- Download the Duo Mobile application to all of your registered devices for the ability to generate one-time codes in the event that you lose cell, data, or Wi-Fi service.

For help with your password, university email, Carmen, or any other technology issues, questions, or requests, contact the Ohio State IT Service Desk. Standard support hours are available at ocio.osu.edu/help/hours, and support for urgent issues is available 24/7.

- **Self-Service and Chat support:** ocio.osu.edu/help
- **Phone:** 614-688-HELP
- **Email:** servicedesk@osu.edu
- **TDD:** 614-688-8743

Accessibility of course technologies

This online course requires use of Carmen (Ohio State's learning management system) and other online communication and multimedia tools. If you need additional services to use these technologies, please request accommodations with your instructor.

- Carmen Canvas Accessibility
- CarmenZoom Accessibility

Feedback and Response Time

Project grading and feedback can generally be expected within 2 weeks.

You can expect a reply to emails within 24-36 hours Monday - Friday, but no response should be expected between 5pm and 8am.

Carmen

~~Carmen (carmen.osu.edu) is used for general communication through announcements. Carmen is where assignment information, sharing ideas and work, collaborative engagement and assignment development, grades and feedback, readings, and general course content components are posted.~~
Not applicable to our course. Refer to Communication section.

Email

~~Email through Carmen's inbox function or through your BuckeyeMail will be the only source of private and secure digital conversations we will use with you. Secure information on general concerns, assignments, class inquiries, or other similar topics should be addressed using these sources.~~
Not applicable to our course. Refer to Communication section.

~~All university correspondence is sent to your BuckeyeMail email address, and all email sent to faculty and staff should be sent from your BuckeyeMail email address.~~
Not applicable to our course. Refer to Communication section.

Ohio State will never ask for your Ohio State username or password. Do not reply to any email asking for your Ohio State username, password, or other personal information. Report such messages to report-phish@osu.edu.

PPE and Related College Covid Policies

Safe campus requirements include but are not limited to wearing masks, hand hygiene, physical distancing, health symptom monitoring, participating in contact tracing, quarantine and isolation, and additional safety expectations detailed at safeandhealthy.osu.edu. All Ohio State students, faculty and staff are expected to meet the behavioral and safety expectations under the Safe Campus Requirements when they physically participate in any university activity, on or off campus. All students, faculty and staff also will be required to perform a daily health check to report body temperature each day they intend to be physically on an Ohio State campus. Failure to adhere to these requirements will be addressed through standard enforcement mechanisms, and an approach built on escalation, whereby adherence will be reinforced through education, choice and peer support before escalating to disciplinary action whenever possible. Where violations are serious and/or ongoing, however, they will be addressed as follows:

- A student and/or student organization will be referred for disciplinary action where the student and/or student organization's behavior endangers the health or safety of campus community members, on or off campus, and/or fails to comply with the directives outlined in the Safe Campus Requirements. o During an incident in which a student is not adhering, the student should first be asked to comply (e.g., to wear a mask). If this does not resolve the situation, the student should be reminded about safe and healthy requirements. If the student continues to refuse, the student should be told to leave the location and not to return until they are prepared to follow the requirements.
- For all situations, except those students who quickly comply when reminded, the incident should be reported to the Office of Student Life Student Conduct for potential disciplinary action and to assist with appropriate tracking. Even if the student's name is unknown, a report to Student Conduct should be made to assist the university in evaluating adherence efforts; however, it should be acknowledged that Student Conduct will be unable to take disciplinary action without identifying information.
- Read more about campus safety policies on Safe and Healthy Campus Expectations and Accountability Measures

COVID-19-Related Attendance Concerns and Planned Course Modifications

Students unable to attend class because of positive diagnosis, symptoms, or required quarantine due to exposure will transition course activities to distance learning to the extent that they are able during periods

of mandated absence. Students will work with instructors to confirm their ability to participate or alternative learning activities related to course objectives and assignments will be provided.

If an entire class is required to quarantine, instruction will transition to online interactions and learning at a distance will occur. All university standards and policies remain in place as related to Title IX, academic misconduct, allowances for students with disabilities, studio conduct and respect for others, and other related issues. We will be meeting and interacting in an online format, not an anonymous one. We will conduct ourselves and treat others as if we are meeting in person.

If the university suspends in-person classes, this course will transition to an online delivery mode for the remainder of the semester.

If an instructor is unable to attend class in person because of positive COVID-19 diagnosis, symptoms, or required quarantine, a substitute instructor may be assigned to ensure course continuity. If the instructor is able, the course may transition to an online delivery mode temporarily.

Academic Misconduct

It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term "academic misconduct" includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations and artwork created in studio courses. Instructors shall report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-487). For additional information, see the Code of Student Conduct

The Department of Art adheres to all aspects of this Code of Conduct especially in matters relating to the following: Academic Misconduct, Endangering Health or Safety, Sexual Misconduct, Destruction of Property, and Theft/Unauthorized Use of Property.

Reusing Past Work

In general, you are prohibited in university courses from turning in work from a past class to your current class, even if you modify it. If you want to build on past research or revisit a topic explored in previous courses, please discuss the situation with your instructor at the start of the assignment/project.

Citing Your Sources

Cite your sources to back up what you say and write. (Use a citation generator if you are unsure of the proper citation format.) If you use a photograph or are particularly inspired by another work and wish to include, mimic, or apply any part of it to your work, cite it. We will discuss precedent usage and appropriation in class. While precedent usage is expected to inspire new iterations and build skills, you are expected to credit your sources and work to distinct and individual challenge solutions.

Disability Services

The University strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers based on your disability (including mental health, chronic or temporary medical conditions), please let us know immediately so that we can privately discuss options. To establish reasonable accommodations, we may request that you register with Student Life Disability Services. After registration, make arrangements with us as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion. Fore more information contact the SLDS office.

- **Email:** slds@osu.edu
- **Website:** slds.osu.edu
- **Phone:** 614-292-3307
- **Address:** 098 Baker Hall
  113 W. 12th Ave
  Columbus, OH 43210

Accommodations

In-person classes (as well as the in-person components of hybrid classes) are expected to make *reasonable accommodations* for students who are unable to be safely present in the classroom *and* have been approved for an accommodation by the office of Student Life Disability Services (SLDS). For a lecture course, such an accommodation might mean streaming lectures on Zoom or making recordings available to the students. For classes that involve laboratory work, studio work, or a mix of lecture and discussion, a reasonable accommodation will not always be possible. Students are expected to work with their advisors and, where appropriate, SLDS to find workable solutions to their scheduling needs.

Grade Forgiveness

The Grade Forgiveness Rule allows undergraduate students to petition to repeat up to three courses. The grade in the repeated course will permanently replace the original grade for the course in the calculation of the student's cumulative GPA.

Only a first repeat can be used this way; all other repeats of the same course will be included under the general course repeatability rule.

The original grade will remain on the student's transcript and some graduate/professional school admission processes will re-calculate the student's GPA to include the original grade. See: Grade Forgiveness for more information.

Diversity

The Ohio State University affirms the importance and value of diversity in the student body. Our programs and curricula reflect our multicultural society and global economy and seek to provide opportunities for students to learn more about persons who are different from them. We are committed to maintaining a community that recognizes and values the inherent worth and dignity of every person; fosters sensitivity, understanding, and mutual respect among each member of our community; and encourages each individual to strive to reach ~~his or her~~ their own potential. Discrimination against any individual based upon protected status, which is defined as age, color, disability, gender identity or expression, national origin, race, religion, sex, sexual orientation, or veteran status, is prohibited.

Sexual Misconduct/Relationship Violence

Title IX makes it clear that violence and harassment based on sex and gender are Civil Rights offenses subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories (e.g., race). If you or someone you know has been sexually harassed or assaulted, you may find the appropriate resources at http://titleix.osu.edu or by contacting the Ohio State Title IX Coordinator, Kellie Brennan, at titleix@osu.edu

Mental Health Services

As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student's ability to participate in daily activities. The Ohio State University offers services to assist you with addressing these and other concerns you may be experiencing. If you or someone you know are suffering from any of the aforementioned conditions, you can learn more about the broad range of confidential mental health services available on campus via the Office of Student Life's Counseling and Consultation Service (CCS) by visiting ccs.osu.edu or calling 614-292-5766. CCS is located on the 4th Floor of the Younkin Success Center and 10th Floor of Lincoln Tower. You can reach an on call counselor when CCS is closed at 614-292-5766 and 24 hour emergency help is also available through the 24/7 National Suicide Prevention Hotline at 1-800-273-TALKor at suicidepreventionlifeline.org.

- **Safe University Escort Service**

- **Website:** https://housing.osu.edu/living-well/safety1/
- **Phone:** 614-292-3322

Trigger Language Warning

Some content of this course may involve media that may be triggering to some students due to descriptions of and/or scenes depicting acts of violence, acts of war, or sexual violence and its aftermath. If needed, please take care of yourself while watching/reading this material (leaving classroom to take a water/bathroom break, debriefing with a friend, contacting a Sexual Violence Support Coordinator at 614-292-1111, or Counseling and Consultation Services at 614-292-5766, and contacting the instructor if needed). Expectations are that we all will be respectful of our classmates while consuming this media and that we will create a safe space for each other. Failure to show respect to each other may result in dismissal from the class.

General Class and Studio Policies

Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with differences of race, culture, religion, politics, sexual orientation, gender identity and expression, and nationalities. Class rosters are provided to the instructor and may include the student's legal name unless changed via the University Name Change policy. We will gladly honor your request to address you by another name or gender pronoun. Please advise us of this early in the semester so that we may make appropriate changes to our records.

Tolerance. Required and elective art courses contain content that can include some language, imagery, or dialogue that may be challenging or offend some students. While no student is required to participate in a presentation or discussion of art or design that offends them, it is important to remain open-minded and participate in a cooperative and respectful manner. Art can often challenge our ideas and experiences, and can lead us into some lively discussion, concepts and imagery. Differences (in ideas, perspectives, experiences, etc.) can be positive, productive and educational, challenging and provocative, so please, engage in the exchange of ideas respectfully. Please see us with your concerns as soon as possible.

Please contact us in advance (during the first week of class or as soon as circumstances develop during the term) if you have circumstances that may affect your performance and ability to fulfill your responsibilities in this course.

Data Responsibility

Back up your work. Inevitably, computers crash. Sometimes they get stolen. There are measures that you can take to prevent significant loss of data. These include Cloud back-ups, external devices or disc storage.

Resources

Textures

- CCo Textures
- PBR Horde
- Dagin Berth

3D Models

- Blendswap
- 3D Model Haven
- Blenderkity
- Sketchfab
- Clara.io
- Free3D
- Pinshape
- Scan the World
- My Mini Factory
- Megascans
- CG Trader
- 3D Export

Free Stock Photos

- Wikimedia Images
- unsplash
- Pexels
- Pixabay
- Stocksnap
- Burst
- Reshot
- Free Stocks
- Skitter Photo
- Wiki: Online Image Archives
- Wiki: Public-domain Image Resources

Free Stock Footage

- Wikimedia Videos
- Pexels
- Mixkit
- Pixabay
- Coverr
- Videvo
- Mazwai
- Videezy
- Wiki: Film Archives
- Wiki: Television Archives

Free Audio & Sound

- Wikimedia Audio Files
- BBC Sound Library
- freesound
- Free to Use Sounds
- American Archive
- British Library Sounds
- Institut national de l'audiovisuel
- Sound Bible
- Game Sounds
- Videvo Music
- Videvo Sound FX
- Wiki: Sound Archives

Awesome Resources

- Wiki: Free Sound Resources
- Wiki: Free Image Resources
- Wiki: Public-domain Resources
- Wiki: Public-domain Image Resources