AD 490 MONSTER FX

College of Art+Design NJIT

SPRING 2025

Thursdays: 600PM – 850 PM

Miguel Rodrigues mhr@njit.edu

Office Hours
By Appointment

DESCRIPTION

The course will introduce students to the language and conventions of manipulating tools and to utilize techniques to develop and create creature effects for film, video games, interactive media and/or animation.

OBJECTIVES

This course is meant to provide students with exposure to CFX development & storytelling with CFX. Students will practice industry level techniques to create special FX with 2d, 3d, prosthetics, make-up, and/or video techniques. Students will obtain skills with conceptualization and animation based special FX for creatures and monsters. Obtain the ability to finalize a project from beginning to end with strong and also subtle visual storytelling components.

INSTRUCTOR EXPECTATIONS

At all classes you are expected to bring new computer files, renderings, and hand drawings (sketches) relevant to the project in progress. You are expected to work each and every day on the projects assigned. If for any reason you doubt your ability to do so you should seriously consider whether you belong in this studio. While this course introduces and uses several software packages, you should not rely on this course to teach them to you. Make use of all available resources to learn the software, books, online help, instructors and fellow students. You are accountable for technical and creative process for this class.

CLASS POLICIES

Assignments.

Assignments are due at the beginning of class. Assignments that are not finished will not be accepted or graded. Late work will be graded down one letter grade for every class late. All preliminary and final work must be uploaded to Class Google Drive and KEPLER for presentations and grading.

Academic Warning.

Students who do not complete and submit assignments on time and to a satisfactory standard will fail the class. It is the student responsibility to obtain missed assignments from other classmates and make up work in time for the next class.

RECOMMENDED BIBLIOGRAPHY

Class Policies.

Cell phones, and non-course related internet usage will not be used during class.

Autodesk Maya documents: https://help.autodesk.com/view/MAYAUL/2025/ENU/ Autodesk Maya 2025 Basics Guide by Kelly L. Murdok

GRADING

The following factors will be considered when assigning your grade.

A. Ability to intellectually engage the material investigated in the course.

Students are to thoughtfully engage the material presented in readings, presentations and discussions. Responses to questions should be directly and thoughtful related to topics investigated in the assignment.

B. Communication.

The ability to communicate ideas and concepts to others. This includes written, verbal, and visual communication skills. Outside critics will be brought in at the end of some projects to review your work in an open forum environment. These presentations should be considered "client presentations" and should be presented with a level of professionalism consistent with your work.

C. Independent thinking.

Independent thinking will be evaluated and will be based on the ideas and thoughts developed on an independent basis by the student. Depth of creative thought is primary to the independent thinking evaluation. Independent thinking must be clearly demonstrated in all aspects of the course including verbal participation in the classroom.

D. Professional Attitude.

Students are to express and articulate clearly their view toward the topics in this course in a method reflects the quality of a professional in the field of design. It is the ethical responsibility of the student to support the learning community in this course in a positive and constructive manner.

Professional attitude includes the ability to receive and give critical feedback, respond to challenging situations with a positive attitude, and support an excellent working studio environment are all essential to receiving high marks in professional attitude evaluations.

Grade breakdown.

10% Class Participation 90% Projects 1, 2, 3, 4, 5 (18% each)

A/4.0 (superior) B+/3.5 (excellent) B/3.0 (very good) C+/2.5 (good) C/2.0 (acceptable) D/1.0 (minimum) F/0.0 (inadequate).

PDF+CRITIQUE

All projects are accompanied by prepared, well designed PDF and presentation to the class. Each grade will be based on final images (50%) and PDF and presentation (50%)

ATTENDANCE, ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES

IF YOU ARE SICK, PLEASE STAY HOME. Student is responsible for letting instructor know of their absence and making up the work. Absences for illness in order to be excused MUST be accompanied by documentation from professional medical personnel who are NOT members of your family. Since religious holidays are known in advance, students who expect to be absent due to religious holidays must notify their instructor by the second week of class.

Students with either freshman or sophomore standing also have an attendance requirement overlaid on the grading criteria. No more than three unexcused absences are permitted without a grade reduction. Each unexcused absence above the three (starting with the fourth) will result in a grade reduction of .5 for the semester. In other words, four absences would result in a maximum grade of B+ (assuming everything done is of "A" quality), five absences would result in a maximum grade of "B", six in a maximum grade of "C+", etc. Students do NOT receive extensions for submission of work due to any unexcused absences. Acceptance of late work is at the discretion of the individual instructor.

NJIT and instructors will endeavor to make any accommodations required and necessary for the success of students with disabilities. However, in order to receive accommodations disabilities MUST be documented with the NJIT Disability Office AND notification of request for accommodation must be made to the instructor by the second week of class. No accommodations can be granted "after the fact" unless due to a situation (injury/illness/etc.) that occurs or is documented during the semester. In those instances accommodations will commence upon notification or observation of the disability.

PROJECT 1 CFX CONCEPTS

Goal:

Practice using the fundamentals of visual story telling to conceptualize a special effect of your own choice. The CFX have to relate to a creature or monster. Conceptualize your own CFX using inspirational images, references, sketches, AI or any other conceptual tools of your choice. Create a mood/inspiration board and a short storyboard with a sequence of key frames depicting some kind of effect in motion. Use color. Depict your CFX with stills in the storyboards format. Examples for concepts can be "Werewolf Transformation" or "Alien Mind-warp" or "Dragon's Breath of Fire" or whatever CFX you want of your own imaginings.

Task:

Create a short storyboard demonstrating your visual effects that you chose. You can conceptualize anything you want relating to dynamics like for example fur, feathers, hair, grooms, muscles, blendshapes, sculpted deformations, fluids, particles, waves, field physics or anything you see fit. Be the best possible CFX concept artist/director that you can be. Try to add "soul" and meaning to your CFX concepts and storyboards.

Delivery:

CFX Concept boards PDF +Presentation

Tools

Any tools you want. (Photoshop, Procreate, Maya, Embergen, UE5, etc.)

Dates:

Final Presentations: 01/30/25

PROJECT 2 BLOCK OUT PHASE

Goals:

Use your concept boards or CFX storyboards from your last project loosely and create an animation sequence based off of your concepts. Create a .mp4 as the final deliverable. Has to be 16:9 aspect ratio but can be 24, 29.97, 30 or 60 fps. Block out your camera and CFX in 3D.

Task:

Create a rough, low poly, dynamical animation based off of the concepts from Project 1. The CFX have to be dynamic in the sense that they have to move and cannot be static. The VFX can be 2D, 3D, Video/Composited, Al generated, and beyond. The choice is yours. Treat this deliverable as an opportunity to explore different tools and techniques. Develop new abilities and during production through exploration. Keep an open mind to new possibilities along the way.

Delivery:

1 .mp4 with the finalized CFX animation sequence.

3-7 Pre-production, production screen shots and final stills + Presentation

Tools:

PureRef, Maya, Zbrush, After Effects, EmberGen, Rebelle, Houdini, etc.

Dates:

Assigned: 02/06/25

Final Presentations: 02/20/25

PROJECT 3 CFX PRODUCTION

Goals:

Go into the files from your block out phase from Project 2 and start to create and finalize up to 50% of your CFX for your scene. Swap out the old low poly assets for high quality creations.

Task:

Use 3D tools to create an animation of CFX. Needs to have at least 50% of assets finalized in the render. Deliver it as a 16:9 aspect ratio 1920x1080 .mp4

Delivery:

1 .mp4 12-24 second animation. 4-8 shots of pre-production, production and post animation. PDF+Presentation

Tools:

Maya, Zbrush, Substance, After Effects, EmberGen, Marvelous, UE5, Houdini, Rebelle, Ziva, or any other software of your choice.

Examples:

Creature Corner with Jared Krichevsky [Ep. 22][SPECIAL GUESS GREGOR PUNCHATZ]

https://www.youtube.com/live/Lmr6evykDgY?si=Ml8BKbKpUsDz5rSz

Dates:

Assigned: 02/27/25

Final Presentations: 03/13/25

PROJECT 4 CRUNCH TIME!

Goals:

Finalize up to 80% of your CFX in your animation scene.

Task:

Use 3D tools to create an animation of CFX. Needs to have at least 75% to 80% of assets finalized in the render. Your Monster or Creature FX should have Lighting now as well.

Deliver the animation scene as a 16:9 aspect ratio 1920x1080 .mp4

Delivery:

1 .mp4 high quality CFX animation. 4-8 shots of pre-production, production and final animation. PDF+Presentation

Tools:

Maya, Zbrush, Nomad Sculpt. After Effects, EmberGen, Marvelous, UE5, Houdini, Rebelle, Ziva, etc.

Dates:

Assigned: 03/20/25

Final Presentations: 04/10/25

PROJECT 5 CFX POST PRODUCTION

Goals

Finalize your CFX scene. Use post-production compositing techniques to improve the final quality. Your Monster or Creature FX should meet industry standard levels of quality.

Task:

Create a high quality scene. Treat this deliverable as if it is for a prestigious client. You can use 3d simulations, live action video, virtual production, mega scans, green screens, or whatever you want to make a visually compelling scene. This should be a finalize scene based on your initial concepts from Project 1.

1 high quality motion pictures, 12-24 sec long sequence in .mp4 format at 16:9 aspect ratio in HD

4-8 shots of pre-production, production and final scene/scenes. mp4 PDF+Presentation

Tools:

Maya, etc.

Dates:

04/10/25

04/24/25