ART/CSC/FST 320 Computer Animation

Fall 2020: August 19 – December 5 3 Credits

Brittany Morago, Ph.D.

moragob@uncw.edu

Office: Zoom

Office Hours: TR 12:00-1:00, or by appointment

Class Time & Location:

Online - asynchronous

Course Description:

Basic principles of animation using 3-D computer-generated animation and basic processes for animating synthetic objects through structured exercises. Principles of designing and producing 3-D computer-generated animation through the creation of advanced motion studies. Projects focus on developing higher-level skills in model building, animation and color, and lighting.

Software:

We will primarily be using Autodesk Maya and Adobe After Effects in this course. You can download a student version of Maya from https://www.autodesk.com/education/edu-software/overview?sorting=featured&page=1. Scroll down to the Maya box and log in with your Autodesk account that uses your uncw.edu e-mail. Information about obtaining Adobe Creative Cloud programs through UNCW licensing can be found at https://uncw.edu/itsd/working/adobe.html.

There is no guarantee that all software used in this course will run on personal computers. Students may have to use university computers to complete assignments. All students in this class have access to the Digital Arts Lab on the first floor of the Congdon Hall and the Digital Arts Lab located in Friday Annex 159.

Prerequisites:

ART/CSC/FST 220

Required Text and Materials:

- *Rig it Right! Maya Animation Rigging Concepts*, 2nd Edition by Tina O'Hailey
- Art supplies for drawing and sculpting

Recommended Text:

- The Animator's Survival Kit by Richard Williams
- Cartoon Character Animation with Maya by Keith Osborn

Grading:

Final letter grades will be assigned as follows:

A: 93+ A-: 90-92 B+: 87-89 B: 83-86 B-: 80-82 C+: 77-79 C: 73-76 C-:70-72 D+: 67-69 D-: 63-66 D-:60-62

F: Less than 60

Coursework will be used to compute final grades as follows:

Exercises: 20%

Animation Assignments: 40%

Semester Project: 40%

Exercises are smaller-scale assignments that will closely follow lecture material. Students will recreate a set scene to practice newly introduced techniques.

Animation Assignments are longer, more open-ended and creative projects where students can further practice growing animation skills on a scene of their own design.

Semester Projects will consist of original animation shorts completed over the course of the semester. Students will go through the production process of developing a storyline, characters, models, rigs, etc. and assembling and editing a 3D animation to be screened during Finals Week.

Course Policies:

- General computer literacy and prior 3D modeling experience are required for this course. Also desirable are artistic and cinematic interests. 3-D graphics and animation work is very time-consuming, akin to an art-studio, film-workshop, or programming course. Plan carefully to complete projects in a timely manner.
- Participation in discussion boards through videos and written comments is required in conjuction with assignments. The visual, creative, and technical nature of this class means regularly sharing work and techniques with classmates is a major learning opportunity. Fully take advantage of this.
- Only one late exercise or animation assignment will be accepted over the course of the semester. The idea is that you can use this one "credit" if you get sick or have an emergency. The assignment just needs to be turned in by the last day of classes (November 24). Please indicate in the comments box on submission page that you want to use your late credit. All other assignments will receive a 0 if turned in late. In my experience, this helps keeps students on track throughout the semester. It is vital you meet deadlines for the Semester Project. Falling behind on this large project easily cascades into not having adequate work done at the end of the semester.
- Academic integrity is expected on all coursework. Evidence of copying or sharing work on assignments will result in a zero for the assignment and will be reported to the university. The university may or may not decide to take further action.
- Office hours are times I set aside each week to help you. If you want to come to scheduled hours, you do not need to make an appointment.
- Given the open-ended and creative nature of this class, you may explore a wide variety of subjects in your work. Out of respect for your classmates, avoid developing any models or

- animations that may be considered inappropriate or offensive. I reserve the right to not grade work and ask you to redo any work that is considered problematic in this regard.
- All videos and digital resources provided on Canvas are property of UNCW. You may not download and post them elsewhere.
- This syllabus is subject to change with reasonable notice.

Student Learning Outcomes:

- Students gain understanding in mathematical, algorithmic, and conceptual techniques related to animating computer-graphics models and environments.
- Students develop the ability to model and rig objects and characters in three dimensions using constraints, expressions, and scripting in computer animation software.
- Students learn aspects of the topology of polygon, NURBs, and subdivision-surface modeling that relate to deformations used in animation.
- Students understand and apply concepts of narrative structure and animation technique.
- Students model, rig, shade, and animate characters of their own creation, presenting their work for class critique.
- Students work together as a large, coordinated group to complete a fully realized animated-short film project from concept through to post-production and screening. (Modified due to COVID-19 constraints.)
- Students learn aspects of digital production and workflow as applied in current industry.

Academic Integrity

University Policy on academic integrity will be followed for this course. Cheating will be taken very seriously, resulting in harsh penalties. Since the skills required in this class are also required in the next class, cheating in this class will seriously hamper your ability to pass the next class.

The University of North Carolina Wilmington is a community of high academic standards where academic integrity is valued. UNCW students are committed to honesty and truthfulness in academic inquiry and in the mastery of existing knowledge. This commitment begins when new students matriculate at UNCW, continues as they create work of the highest quality while part of the university community, and endures as a core value throughout their lives.

It is the responsibility of every faculty member, student, administrator and staff member of the university community to uphold and maintain the highest academic standards and integrity of the university. Any member of the university community who has reasonable grounds to believe that an infraction of the Honor Code has occurred has an obligation to report the alleged violation to the faculty member teaching the class who, in turn, must report the allegation to the Office of the Dean of Students. This obligation is a core value of the Honor Code, and must be fulfilled by each and every member of the university.

Special Needs

If you have a disability and need reasonable accommodation in this course, you should inform the instructor of this fact in writing within the first week of class or as soon as possible. If you have not already done so, you must register the Office of Disability Services in DePaolo Hall (ext. 2-3746) and obtain a copy of your Accommodation Letter. You should then arrange a meeting to make mutually agreeable arrangements based on the recommendations of the Accommodation Letter.

Title IX

UNCW takes all forms of interpersonal violence very seriously. When students disclose, first- or third-hand, to faculty or staff about sexual misconduct, domestic violence, dating violence and/or stalking, this information must be reported to the administration in order to ensure that students' rights are protected, appropriate resources are offered, and the need for further investigation is explored to maintain campus safety.

There are three confidential resources who do not need to report interpersonal violence: UNCW CARE, the Student Health Center, and the Counseling Center. If you want to speak to someone in confidence, these resources are available, including CARE's 24-hour crisis line (910-512-4821).

For more information, please visit www.uncw.edu/sexual misconduct or www.uncw.edu/care.