



CAPILANO UNIVERSITY

| COURSE OUTLINE | | |
|---|--------------------------------|---------------|
| TERM: Fall 2021 | COURSE NO: DIGI 230 | |
| INSTRUCTOR: | COURSE TITLE: 3D Animation III | |
| OFFICE: LOCAL: E-MAIL: @capilanou.ca | SECTION NO(S): | CREDITS: 6.75 |
| OFFICE HOURS: | | |
| COURSE WEBSITE: | | |

Capilano University acknowledges with respect the Lil'wat, Musqueam, Squamish, Sechelt, and Tsleil-Waututh people on whose territories our campuses are located.

COURSE FORMAT

Nine hours of class time per week for a 15-week semester.

COURSE PREREQUISITES

DIGI 140

CALENDAR DESCRIPTION

This course will refine a student's acting, posing and animation appeal to bring entertaining characters to life. Students will learn to define the subtle nuances of character animation while managing scenes with increased complexity and detail. Students will gain valuable experience animating physically realistic creatures in motion.

REQUIRED TEXTS AND/OR RESOURCES

Osipa, Jason. *Stop Staring: Facial Modeling and Animation Done Right*. Sybex, 2003. Print.
Williams, Richard. *The Animator's Survival Kit*. 2nd ed. Faber & Faber, 2012. Print.

E Books: Links to required reading material will be provided on moodle in the form of pdfs and ebooks.

Viewing: You will be asked to watch films as part of this class. You can search our channel data base and access films and tv using your Cap Logon through the library:

<https://libguides.capilanou.ca/az.php?t=1355>

COURSE STUDENT LEARNING OUTCOMES

On successful completion of this course, students will be able to do the following:

- analyze and animate the physical motion of quadruped creatures;
- apply a professional level of polish to animated scenes;
- integrate motion capture technology in the creation of animated scenes;
- develop approaches to adding dynamic simulations to animated scenes;
- use animation skills and techniques creatively and efficiently in a production setting;
- complete an animation portfolio showcasing their advanced animation abilities.

COURSE CONTENT

Weeks 1 - 4

Character animation

- Idle Animation... Walk Cycle with personality
- Side-step... Transferring weight on a character
- Animation Process... Discussion on pre-visualizing the final animation through thumbnails and key poses.
- *Assignment 1 - Animate a character running on ice, due week 4.*

Weeks 4 - 5

Creature animation

- Animal anatomy and movement
- Gathering and cataloging appropriate reference materials
- Quadruped animation cycles
- Portfolio Presentation Discussed - final portfolio will be presented week 15
- *Assignment 2 - Animate a quadrupedal character, due week 6.*

Week 6

Advanced animation project

- Comparing and contrasting examples of good and bad animation demo reels
- Entertaining animation ideas
- Critical path creation, task breakdown and project scheduling
- Climb Up, Jump Down animation
- *Assignment 3 - Personal animation project, due week 11.*

Week 7

Winged or Serpentine Characters

- Discussion on methods for solving creature animation problems
- Winged or serpentine cycle animation

Week 8

Assignment 3 project review and critique

- Discussion on camera animation and shot setup

Weeks 9 - 11

Assignment 3 project review and critique

Motion capture in animation

- Capabilities and uses of motion capture in animated productions
- Applying motion capture data to characters
- Cleaning, processing, and parsing motion capture data

Weeks 12 - 15

Group animated project from idea to final production

- *Team project – Group animated production, due week 15.*

EVALUATION PROFILE

| | |
|------------------------------------|------|
| Participation | 10% |
| Exercises | 10% |
| Assignment 1 – Shifting Weight | 10% |
| Assignment 2 – Quadruped Animation | 10% |
| Assignment 3 – Personal project | 30% |
| Team project | 25% |
| Portfolio Presentation | 5% |
| <hr/> | |
| Total | 100% |

GRADING PROFILE

| | | | |
|-------------|------------|------------|-----------|
| A+ = 90-100 | B+ = 77-79 | C+ = 67-69 | D = 50-59 |
| A = 85-89 | B = 73-76 | C = 63-66 | F = 0-49 |
| A- = 80-84 | B- = 70-72 | C- = 60-62 | |

Participation

Students will be evaluated on the following aspects:

- Attendance of classes and labs
- Active engagement in class discussions and projects
- Knowledge of readings and assignments
- The frequency and quality of comments, questions and observations

Incomplete Grades

Grades of Incomplete “I” are assigned only in exceptional circumstances when a student requests extra time to complete their coursework. Such agreements are made only at the request of the student, who is responsible to determine from the instructor the outstanding requirements of the course.

Late Assignments

All assignments must be delivered at the place and time specified by the instructor. Late assignments will only be accepted if prior approval for a late submission date has been given by the instructor.

Missed Exams/Quizzes/Labs etc.

Make-up exams, quizzes and/or tests are given at the discretion of the instructor. They are generally given only in medical emergencies or severe personal crises. Some missed labs or other activities may not be able to be accommodated. Please consult with your instructor.

Attendance

Students are expected to attend all classes and associated activities. Students who miss more than 20% of the course will not receive credit for the course. Attendance will be taken daily and will form part of the participation grade (see Evaluation Profile). Each student is responsible for the material

covered and any work assigned in class. The instructor has no obligation to repeat material for students who miss classes.

Punctuality

Punctuality is essential. Students more than 15 minutes late for class will be marked absent.

English Usage

Students are expected to proofread all written work for any grammatical, spelling and stylistic errors. Instructors may deduct marks for incorrect grammar and spelling in written assignments.

Electronic Devices

Students may use personal electronic devices during class for note-taking only.

On-line Communication

Outside of the classroom, instructors will (if necessary) communicate with students using either their official Capilano University email or eLearn; please check both regularly. Official communication between Capilano University and students is delivered to students' Capilano University email addresses only.

UNIVERSITY OPERATIONAL DETAILS**Tools for Success**

Many services are available to support student success for Capilano University students. A central navigation point for all services can be found at: <https://www.capilanou.ca/student-life/>

Capilano University Security: download the [CapU Mobile Safety App](#)

Policy Statement (S2009-06)

Capilano University has policies on Academic Appeals (including appeal of final grade), Student Conduct, Academic Integrity, Academic Probation and other educational issues. These and other policies are available on the University website.

Academic Integrity (S2017-05)

Any instance of academic dishonesty or breach of the standards of academic integrity is serious and students will be held accountable for their actions, whether acting alone or in a group. See policy and procedures S2017-05 Academic Integrity for more information: <https://www.capilanou.ca/about-capu/governance/policies/>

Violations of academic integrity, including dishonesty in assignments, examinations, or other academic performances, are prohibited and will be handled in accordance with the Student Academic Integrity Procedures.

Academic dishonesty is any act that breaches one or more of the principles of academic integrity. Acts of academic dishonesty may include but are not limited to the following types:

Cheating: Using or providing unauthorized aids, assistance or materials while preparing or completing assessments, or when completing practical work (in clinical, practicum, or lab settings), including but not limited to the following:

- Copying or attempting to copy the work of another during an assessment;
- Communicating work to another student during an examination;
- Using unauthorized aids, notes, or electronic devices or means during an examination;
- Unauthorized possession of an assessment or answer key; and/or,
- Submitting of a substantially similar assessment by two or more students, except in the case where such submission is specifically authorized by the instructor.

Fraud: Creation or use of falsified documents.

Misuse or misrepresentation of sources: Presenting source material in such a way as to distort its original purpose or implication(s); misattributing words, ideas, etc. to someone other than the original source; misrepresenting or manipulating research findings or data; and/or suppressing aspects of findings or data in order to present conclusions in a light other than the research, taken as a whole, would support.

Plagiarism: Presenting or submitting, as one's own work, the research, words, ideas, artistic imagery, arguments, calculations, illustrations, or diagrams of another person or persons without explicit or accurate citation or credit.

Self-Plagiarism: Submitting one's own work for credit in more than one course without the permission of the instructors, or re-submitting work, in whole or in part, for which credit has already been granted without permission of the instructors.

Prohibited Conduct: The following are examples of other conduct specifically prohibited:

- Taking unauthorized possession of the work of another student (for example, intercepting and removing such work from a photocopier or printer, or collecting the graded work of another student from a stack of papers);
- Falsifying one's own and/or other students' attendance in a course;
- Impersonating or allowing the impersonation of an individual;
- Modifying a graded assessment then submitting it for re-grading; or,
- Assisting or attempting to assist another person to commit any breach of academic integrity.

Sexual Violence and Misconduct

All Members of the University Community have the right to work, teach and study in an environment that is free from all forms of sexual violence and misconduct. Policy B401 defines sexual assault as follows:

Sexual assault is any form of sexual contact that occurs without ongoing and freely given consent, including the threat of sexual contact without consent. Sexual assault can be committed by a stranger, someone known to the survivor or an intimate partner.

Safety and security at the University are a priority and any form of sexual violence and misconduct will not be tolerated or condoned. The University expects all Students and Members of the University Community to abide by all laws and University policies, including B.401 Sexual Violence and Misconduct Policy and B.401.1 Sexual Violence and Misconduct Procedure (found on Policy page <https://www.capilanou.ca/about-capu/governance/policies/>)

Emergencies: Students are expected to familiarise themselves with the emergency policies where appropriate and the emergency procedures posted on the wall of the classroom.

DEPARTMENT OR PROGRAM OPERATIONAL DETAILS

Professional Behaviour

Students must demonstrate a professional attitude and behaviour toward work, other students, guests, and instructors. Each student should demonstrate reliability, respect for and co-operation with colleagues. A willingness to work calmly and courteously under difficult conditions as well as a determination to achieve first-class work while meeting deadlines is necessary in this course. Students must show respect for equipment and facilities.

Continuation Requirement

Students must successfully complete the required and elected 3D Animation (DIGI) course credits in one term before continuing to the next term.