



CAPILANO UNIVERSITY

COURSE OUTLINE		
TERM: Fall 2021	COURSE NO: DIGI 132	
INSTRUCTOR:	COURSE TITLE: 3D Design for Production I	
OFFICE: LOCAL: E-MAIL: @capilanou.ca	SECTION NO(S):	CREDITS: 4.5
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

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

COURSE PREREQUISITES/CO-REQUISITES

None.

CALENDAR DESCRIPTION

In this course students will compare and contrast industry approaches to designing and creating original 3D characters, props and environments for use in video games, television and film projects. Students will research, analyze and apply the fundamental techniques of modeling, sculpting, texturing, lighting and rendering in the creation of original 3D assets. Through reference and research, students will develop an appreciation for what makes an appealing 3D design suitable for use in a production pipeline.

REQUIRED TEXTS AND/OR RESOURCES

Yot, Richard. *Light for Visual Artists: Understanding & Using Light in Art & Design*. Laurence King Publishing, 2011. Print.

COURSE STUDENT LEARNING OUTCOMES

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

- identify the role of a model, texture and lighting artist in animated productions;
- model, sculpt texture, shade and light assets for use in 3D animated productions;
- create characters, props and environments based on concept designs;
- identify and describe key artistic and technical traits of outstanding 3D assets;
- produce a body of work showcasing the student's abilities as a 3D artist.

COURSE CONTENT

Weeks 1 – 3

Creating a Robot - Introduction to 3D modeling and texturing

- Introduction to the 3D artist's toolset
- Overview of a production pipeline
- Completion of weekly research projects covering techniques required for assignments
- Assignment 1 – Creating a 3D robot, due week 4

Weeks 4 – 7

Creating props from design to a final rendered model

- 3D robotic character presentation and critique
- Modeling, Texturing, Lighting and Rendering a prop
- Completion of weekly research projects covering techniques required for assignments
- Assignment 2 – Creating a 3D prop, due week 8

Weeks 8 – 11

Creating and lighting a 3D environment

- 3D prop presentation and critique
- Modeling, texturing, lighting and rendering an environment
- Completion of weekly research projects covering techniques required for assignments
- Assignment 3 – Creating a 3D environment, due week 11

Weeks 12 – 15

Creating a 3D Character for an animated production

- 3D environment presentation and critique
- Introduction to organic modeling techniques
- Sculpting characters
- Texturing, lighting and rendering a character
- Completion of weekly research projects covering techniques required for assignments
- Assignment 4 – Final render of a complete character model, due week 14

EVALUATION PROFILE

Participation	10%
Weekly research projects	15%
Assignment 1 – Creating a 3D robot	15%
Assignment 2 – Creating a 3D prop	20%
Assignment 3 – Creating a 3D environment	20%
Assignment 4 – Creating a 3D character	20%
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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.