

DIGI 142		3D Design for Production II		
Spring Term 2015	3D ANIMATION FOR FILM AND GAMES COURSE OUTLINE			
Credits 3.0	Course Format: 4 lecture hours per week for 15 weeks			
Prerequisites	DIGI 132 – 3D Design for Production I			
Instructor	TBA	TBA@capilano.ca	Office: BC2xx	Local: xxxx

SCHOOL OF MOTION PICTURE ARTS VISION STATEMENT

The School of Motion Picture Arts is dedicated to inspiring a new generation of independent Canadian filmmakers through the fostering and mentoring of emerging talent utilizing progressive learning environments and authentic production experiences, such that graduates make valued contributions to the global media culture.

MISSION STATEMENT

The program strives to provide a comprehensive artistic and technical education, preparing students in the art of animation and encouraging critical reflection, collaboration and professionalism. Through innovative teaching, local and international partnerships and the highest standards of artistic and academic excellence, the program seeks to ensure student success in creative careers within the animation industry.

COURSE OBJECTIVES

In this course students will continue to refine their 3D modeling, sculpting, texturing, shading and lighting skills introduced in 3D Design I to create production ready assets. Students will learn intermediate techniques in digital sculpture, shading, lighting and rendering to create professional looking 3D assets.

COURSE STUDENT LEARNING OUTCOMES

Upon successful completion of this course, students will be able to:

- create detailed, professional looking 3D assets;
- utilize current industry techniques for 3D production;
- produce appealing, realistic renders of original 3D work;
- evaluate risks and implement technical strategies for efficient production process.

REQUIRED TEXTS

Birn, Jeremy. *Digital Lighting and Rendering* .3rd Ed. New Riders, 2013. Print.
Wissler, Virginia. *Illuminated Pixels: The Why, What, and How of Digital Lighting*. Cengage Learning PTR, 2012. Print.

COURSE CONTENT

Weeks 1 - 3

Sculpting organic forms and details

- Intermediate digital sculpture
- Sculpting mass, form, proportion and structure
- Sculpting details
- Industry techniques and uses for digital sculpture
- *Assignment 1 – Sculpt a head likeness, due week 4*

Weeks 4 - 6

Hard surface sculpting and texturing techniques

- Introduction to hard surface digital sculpting
- Tools and techniques for creating hard surface models
- Textures and shading for hard surface assets
- *Assignment 2 – Hard surface sculpt, due week 7*

Weeks 7 - 8

Creating realistic high resolution details for assets

- Using high resolution sculpted detail on a production model
- Techniques for creating models based on digital sculpture
- Workflows for implementing high resolution detail in rendering and production
- *Assignment 3 – Surface detailing, due week 9*

Weeks 9 - 11

Surfacing, shaders and lighting

- Intermediate lighting and shading techniques
- Surface properties, materials and shaders
- Lighting workflows
- Efficient rendering workflows
- *Assignment 4 – Create a realistic render of a production ready asset, due week 11*

Weeks 12 - 15

Group animated project from idea to final production

- Review and critique of completed students' projects at the end of week 15
- Final term project due

EVALUATION PROFILE

Participation	15%
Assignment 1 – Sculpt a likeness	15%
Assignment 2 – Hard surface sculpt	15%
Assignment 3 – Surface detailing	10%
Assignment 4 – Realistic render	15%
Term project	30%
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Total	100%

GRADING PROFILE

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

OPERATIONAL DETAILS

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

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 have respect for equipment and systems and constructive response to criticism.

Attendance

Regular attendance is essential. 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 missed class.

Punctuality

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

Participation

Students will be evaluated on the following aspects:

- Attendance of classes and labs
- Active engagement in class discussions and projects
- Knowledge of reading / assignments
- Frequency and quality of comments, questions and observations

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.

Submission of Late Assignments

Although late assignments will not be graded, all assignments must be submitted in order to receive a passing grade in the course.

Incomplete Grades

Grades of incomplete (I) will may be assigned in exceptional circumstances. If the date for the submission of incomplete assignments is not met, the grade will automatically revert to the grade based on the student's present achievements. In addition, the student concerned must submit a written request for approval by the instructor prior to the last regular class in the course.

Continuation Requirement

Students must successfully complete all 3D Animation courses in one term before continuing to the next term.

Emergency Procedures

Students should familiarize themselves with emergency procedures posted in the classroom.