

DIGI 130		3D Animation I		
Fall Term 2014	3D ANIMATION FOR FILM AND GAMES COURSE OUTLINE			
Credits 4.5	Course Format: 6 lecture hours per week for 15 weeks			
Prerequisites	None			
Instructor	TBA	TBA@capilano.ca	Office: BC2xx	Local: xxxx

## SCHOOL OF MOTION PICTURE ARTS VISION STATEMENT

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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

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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

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In this course, students will be introduced to the fundamental principles of animation, and the laws of basic body mechanics. Through the study and application of classical animation techniques and timing, students will examine the importance of creating animated characters with weight, strong posing and believable performance.

## COURSE STUDENT LEARNING OUTCOMES

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Upon successful completion of this course the student will be able to:

- create and use live action video reference to help create believable animation;
- demonstrate an understanding of the fundamental animation principles;
- apply the fundamental principles of animation to create believable character performances;
- review and critique animated sequences;
- examine and breakdown an animation script or storyboard to create animation.

## REQUIRED TEXTS

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Williams, Richard. *The Animator's Survival Kit*. 2nd ed. Faber & Faber, 2012. Print.

## RECOMMENDED TEXTS AND MATERIALS

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Johnson, Ollie and Frank Thomas. *The Illusion of Life: Disney Animation*. Disney Editions, 1995. Print.  
A cell phone, iPod or camera capable of recording video footage for reference. A mirror and stopwatch.

## COURSE CONTENT

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### Week 1

Introduction to 3D animation

- Overview of animation principles for creating motion
- Timing, spacing, keyframes and breakdowns
- Slow-in and slow-out and path of action
- Stretch and squash
- Setting up a camera
- *Assignment 1 – The bouncing ball, due week 2*

### Week 2

Antics and overshoots

- *Assignment 2 – The bouncing ball on stairs, due week 3*

### Week 3

Overlapping action

- *Assignment 3 - Overlapping action of a ball with a tail, due week 4*

### Week 4

The half biped jumping sequence

- Applying animation principles to bring life to a multi-limbed character
- *Assignment 4 - Half biped jumping sequence, due week 5*

### Week 5

The half biped-walk cycle

- Essential keys for a walk cycle
- Straight ahead vs. pose to pose animation
- Balance and weight
- *Assignment 5 – Walking legs, due week 6*

### Weeks 6 - 7

The full body-walk cycle with personality

- Essential keys for a full body walk cycle
- Balance and weight
- Use of video reference
- *Assignment 6 – The full body walk cycle, due week 8*

### Weeks 8 - 9

Facial expressions and thought process

- Studying the thought process of a character
- Animating facial expressions
- *Assignment 7 – Reaction to dialogue, due week 9*

### Weeks 10 - 12

Acting and pantomime

- Character performance and body language
- Character motivation
- *Assignment 8 – Pantomime, due week 13*

## Weeks 13 – 15

Group animated project from idea to final production

- *Term Project – Group animated production, due week 15*

### EVALUATION PROFILE

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Participation	15%
Assignment 1 – The bouncing ball	5%
Assignment 2 – The bouncing ball on stairs	5%
Assignment 3 – Ball with tail	5%
Assignment 4 – Biped jump	5%
Assignment 5 – Walking legs	5%
Assignment 6 – The full body walk cycle	10%
Assignment 7 – Reaction to dialogue	10%
Assignment 8 – Pantomime	15%
Term project	25%
Total	100%

### GRADING PROFILE

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

### OPERATIONAL DETAILS

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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.