

DIGI 149		Animation Action Analysis		
Spring Term 2015	<b>3D ANIMATION FOR FILM AND GAMES COURSE OUTLINE</b>			
Credits 1.5	Course Format: 2 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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This course takes the student through numerous analytical studies of human and animal motion in order to build a fundamental understanding of movement. Animators and animation designers must understand how things move so that the laws of motion, timing and the principles of animation become inherent skills that allow the animator to focus on the performance of their "actors".

### COURSE STUDENT LEARNING OUTCOMES

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

- ascertain the importance of research in animation and animation design;
- review the principles of animation;
- identify, recognize and analyze the principles of animation and their successful use in feature film animation;
- create a series of reference drawings and designs that identify the key animation principles.

### REQUIRED TEXTS

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

### COURSE CONTENT

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#### Week 1

Introduction to action analysis

- Research tools
- Pioneers in animation
- Newton's laws of motion applied to animation

## **Week 2**

Basics of anatomy in humans and animals

- Sketching structure
- *Assignment 1 - Sketching structure, due week 3.*

## **Week 3**

The concept of key positions of an object in motion

- Timing as it relates to frames per second

## **Week 4**

The hierarchy of animated actions

- Primary, secondary and tertiary actions
- Believability in motion
- Phrasing actions and pacing

## **Week 5**

Slow-in and slow-out, squash and stretch

- *Assignment 2.1 - Research squash and stretch in animation, due week 6.*

## **Week 6**

Arcs and the flow of energy

- *Assignment 2.2 - Research arcs in animation, due week 7.*

## **Week 7**

Anticipation. Drag and the rotation of joints

- *Assignment 2.3 - Research anticipation and drag in animation, due week 8.*

## **Week 8**

Follow through, overlapping action and the s-curve

- *Assignment 2.4 - Research follow through and overlapping action, due week 9.*

## **Weeks 9 - 10**

Bipedal walks and run cycles

- Factors of age and body type
- Exaggeration in animation
- *Assignment 2.5 - Research walks and run cycles, due week 11.*

## **Week 11**

Quadrupedal walks and runs

- *Assignment 2.6 - Research quadrupedal walks and runs, due week 12.*

## **Week 12**

Group animated project from idea to final production

- Sentient and subjective actors
- Mood and purpose in movement
- Tools of communication: hands, face and head
- *Term project - Group animated project, due week 15.*

## **Week 13**

Acting: creating dynamic performances

- The thinking process
- Lip sync

## Week 14

Multiple characters and group dynamics

## Week 15

Group animated project from idea to final production

- Review and critique of completed students' projects

### EVALUATION PROFILE

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Participation	15%
Assignment 1 – Sketching structure	5%
Assignment 2 – Research exercises (6 exercises worth 10% each)	60%
Term project	20%
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.