Mission Statement:
Our mission is to serve as a leading center of Christian thought and action providing an excellent education from a biblical perspective and global context in pivotal professions to equip Christian leaders to change the world.

COURSE SYLLABUS

SCHOOL OF COMMUNICATION & THE ARTS
DEPARTMENT OF CINEMA - TELEVISION

ANIM 450
SPECIAL EFFECTS FOR FILM & TELEVISION

SPRING 2010
WEDNESDAY 9:00 am. - 12:00 pm.

PROFESSOR: DAVID X. XU
Phone: 757-352-4235
Fax: 757-352-4275
E-mail: dxu@regent.edu
Office Hours: Wednesday 12:00 pm -6:00 pm
Office Location: COM 253

All students are required to read and have a thorough understanding of the syllabus. Any questions or concerns need to be addressed to the instructor.
COURSE DESCRIPTION

THIS COURSE IS DESIGNED TO GIVE STUDENTS AN OVERVIEW OF THE HISTORY OF SPECIAL EFFECTS IN FILM AND TELEVISION AS WELL AS HANDS-ON PROJECTS THAT DEMONSTRATE THE TECHNIQUES NEEDED TO WORK WITH MAYA 3D SPECIAL EFFECT, SHOOTING, GREEN SCREEN, EDITING TRICKS, AND COLOR CORRECTION, MOTION CONTROL AND COMPOSITING.

RATIONALE/COURSE OVERVIEW

Maya special effect techniques and Matchmoving techniques are taught in class, weekly assignments and midterm project and final projects are assigned as guided.

Integration of Faith & Learning

There are many scriptures on which this class is based. This class, in attempting to teach the student the “business” of entertainment, does so, based on the biblical principles of honesty, integrity, professionalism, responsibility, humility, and servant leadership. As the Lord directs us to let our yes be yes and our no be no, this class intends to forge a spirit of integrity and honesty in business relationships, as a cornerstone to success in the industry. Students are expected to present themselves in accordance with these principles.

PREREQUISITES

ANIM 115 or CTVU 371 ANIM 203, 213 & 314 are strongly recommended.

Bachelor of Arts in Animation Program Goals:

1. Relevant knowledge of the ways in which Christian principles are evidenced in the practice of their art.
2. Ability to conceptualize the way meaning is structured and perceived in animation.
3. Understanding of the techniques and practices of animation production including conceptualization, modeling & construction, texturing, animation, digital cinematography, and post-production and the use of relevant tools for each of these stages.
4. Proficiency in the production of animation.

Bachelor of Arts in Animation Program Learning Outcomes:

Students will demonstrate:

1. Articulation of their Christian Worldview both written & visual.
2. Understanding of the historical/critical role of animation in our society and globally.
3. Understanding of animation story construction & character development both written & visual.
4. Understanding conceptualization as it applies to animation production both written & visual.
5. Proficiency in Photoshop
6. Proficiency in editing and compositing as it relates to animation.
7. Proficiency in traditional drawing skills
ANIMATION 450 OUTCOMES

By the end of the course, students are expected to master special effect techniques in Maya, including Maya dynamic system, particle system, soft bodies and springs, fluid effects, Maya fur and hair, Maya cloth, N cloth and compositing. Matchmoving techniques, using track and key are also expected to master.

REQUIRED TEXTS AND READINGS

Maya Studio Projects: Dynamics
Publisher: Sybex; Pap/Dvdr edition (November 2, 2009)

COURSE REQUIREMENTS AND ASSIGNMENTS

A. Assignment 1 - Practice class content, create a piece of work using Maya Dynamics, Rigid Bodies, Dynamics Rigid Bodies Constraints (show next class) – (2%) Wk3

B. Assignment 2- Practice class content, create a piece of work using Rigid Bodies optimizing, Intro Particle Effects, Rigid Bodies Particles, Particle collisions, Techniques (show next class) – (2%) Wk4

C. Assignment 3- Practice class content, create a piece of work using Particle expression, Emit function, Advanced expression Techniques (show next class) – (2%) Wk5

D. Assignment 4- Practice class content, create a piece of work using Flow, Goals, Soft bodies and springs, Particle instancing, Rendering Particle, Composting Techniques (show next class) – (2%) Wk6

E. Assignment 5- Practice class content, create a piece of work using Maya Fluid Effects overview, Atmospheric Effects, Pyrotechnic Effects, Affecting Geometry with Fluids
Techniques (show next class) – (2%) Wk7

**F.** Assignment 6- Practice class content, create a piece of work using *Using Fluids to move Cloth, Moving Particle with Fluids, Using Fluids as textures, Creating open water Effects* Techniques (show next class) – (2%) Wk8

**G.** Assignment 7 - Practice class content, create a piece of film work (show next class) – (2%) Wk10

**H.** Assignment 8 - Practice class content, create a piece of work using *Matchmoving Track and Key* Techniques (show next class) – (2%) Wk11

**I.** Assignment 9 - Practice class content, create a piece of work using *Maya Fur & Maya Hair, Applying fur to patch model, Creating Hair, Creating Dynamics Effects with hair, Creating Human hair* Techniques (show next class) – (2%) Wk12

**J.** Assignment 10- Practice class content, create a piece of work using *N Cloth* Techniques (show next class) – (2%) Wk13

**K.** Midterm Project - 25% Wk 8

**L.** Final Project – 35% Wk 15

**M.** University policy requires that all students submit a formal student evaluation of teaching form at the end of the academic term. This mandatory requirement must be completed before students will be able to access their final course grade.

**EVALUATION AND GRADING**

A. Weight

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B. Scale

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Class Schedule:

Week 1  Syllabus introduction, animation piece appreciation
        Midterm project & Final project introduction

Week 2  Lecture:  Maya Special Effects
        Maya Dynamics
        Rigid Bodies Dynamics
        Rigid Bodies Constraints

Workshop: Individually help students to solve problems
Assignments: Practice class content, create a piece of work using Maya Dynamics, Rigid Bodies, Dynamics Rigid Bodies Constraints Techniques
(show next class)  (2%) Wk3

Week 3  Lecture:  Maya Special Effects
        Rigid Bodies optimizing
        Intro Particle Effects
        Rigid Bodies Particles
        Particle collisions

Activity:  Students Present last assignment
Workshop: Individually help students to solve problems
Assignments: Practice class content, create a piece of work using Rigid Bodies optimizing,
Intro Particle Effects, Rigid Bodies Particles, Particle collisions Techniques
(show next class)– (2%) Wk4
Work on Midterm project - Storyboard

Week 4 Lecture: *Maya Special Effects*
- Particle expression
- Emit function
- Advanced expression

Activity: Students Present last assignment
Students Present completed Storyboard (Due day)

Workshop: Individually help students to solve problems

Assignments: Practice class content, create a piece of work using Particle expression, Emit function, Advanced expression Techniques (show next class)– (2%) Wk5
Work on Midterm project

Week 5 Lecture: *Maya Special Effects*
- Flow
- Rendering Particle
- Composting

Activity: Students Present last Assignment
Student present midterm project progress

Workshop: Individually help students to solve problems

Assignments: Practice class content, create a piece of work using Flow, Rendering Particle, Composting Techniques (show next class)– (2%) Wk6
Work on Midterm project

Week 6 Lecture: *Maya Special Effects*
- Maya Fluid Effects overview
- Atmospheric Effects

Activity: Students Present last Assignments
Students Present midterm project progress

Workshop: Individually help students to solve problems

Assignments: Practice class content, create a piece of work using Maya Fluid Effects overview, Atmospheric Effects, Techniques (show next class)– (2%) Wk7
Work on Midterm project

Week 7 Lecture: *Workshop*

Activity: Students Present last Assignments
Students Present midterm project progress

Workshop: Individually help students to solve problems

Assignments: Complete Midterm project (2%)

Week 8 Midterm: Project Due: Students Midterm Project Presentation (25%)

Activity: Students Present last assignment

Workshop: Individually help students to solve problems

Assignments: Continually work on Final project
Week 9 Lecture: **Maya Special Effects**

*Goals*

- Soft bodies and springs
- Painting Effects

**Activity:** Students Present last Assignments  
*Students Present final project progress*

**Workshop:** Individually help students to solve problems

**Assignments:** Practice class content, create a piece of film work using *Goals*  
- Soft bodies and springs Painting Effects Techniques (show next class)  
- (2%) Wk10  
- Work on final project

Week 10 Lecture: **Maya Special Effects**

*Goals, Soft bodies and springs*  
- Maya Fluid Effects  
- Pyrotechnic Effects  
- Affecting Geometry with Fluids

**Activity:** Students Present last Assignments  
*Students Present final project progress*

**Workshop:** Individually help students to solve problems

**Assignments:** Practice class content, create a piece of work using *Goals, Soft bodies and springs*  
- Maya Fluid Effects, Affecting Geometry with Fluid Techniques (show next class)  
- (2%) Wk11  
- Work on final project

Week 11 Lecture: **Maya Special Effects**

- Maya Fur & Maya Hair  
- Applying fur to patch model  
- Creating Hair  
- Creating Dynamics Effects with hair  
- Creating Human hair

**Activity:** Students Present last Assignments  
*Students Present final project progress*

**Workshop:** Individually help students to solve problems

**Assignments:** Practice class content, create a piece of work using *Maya Fur & Maya Hair, Applying fur to patch model, Creating Hair, Creating Dynamics Effects with hair, Creating Human hair* Techniques (show next class)  
- (2%) Wk12  
- Work on final project

Week 12 Lecture: **Maya Special Effects**

- Maya Cloth  
- Making a Robe  
- Making Bathroom Cloth  
- Making a Overalls Cloth
Activity: Students Present last Assignments
Students Present final project progress
Workshop: Individually help students to solve problems
Assignments: Practice class content, create a piece of work using *Maya Cloth*, *Making a Robe*, *Making Bathroom Cloth*, *Making a Overalls Cloth* Techniques
(show next class)– (2%) Wk13
Continually work on Final project

Week 13 Lecture: *Maya Special Effects*  
*N Cloth*

Activity: Students Present last Assignments
Students Present final project progress
Workshop: Individually help students to solve problems
Assignments: Practice class content, create a piece of work using *N Cloth* Techniques
(show next class)– (2%) Wk14
Continually work on Final project

Week 14 Pr Final  
*Workshop*

Week 15 Final  
Students Present Complete Final project (35%)

Breakdown of elements for the grading of the Final Project is as follows:

- Student’s Presentation and Interaction: 10%
- Storyboard: 10%
- modeling & Texture: 10%
- Animation: 10%
- Dynamics Special effects: 45%
- Overall Creativity and Originality: 15%

UNIVERSITY ACADEMIC HONOR CODE

Students are on their honor to complete assignments with honesty and integrity. Academic dishonesty involves intentionally or unintentionally stealing the intellectual property of others. Students are expected to be familiar with the university’s policy on academic integrity found in both the University *Student Handbook* and School of Undergraduate Studies *Catalog* (http://www.regent.edu/general/catalog/) and to follow it. As an academic and Christian community, Regent University takes seriously the call for integrity and penalizes breaches of academic integrity.

Students should be aware that submitted papers may be checked using Safeassign (Blackboard’s plagiarism detection feature). This feature will determine the percentage of the submitted paper that matches other sources and will generate a report. Scores below 15% include quotes and few common phrases or blocks of text that match other documents, these papers indicate no evidence of the possibility of plagiarism. Scores between 15% and 40% include extensive quoted or paraphrased material or may include plagiarism and will require further review. Scores over 40% indicate a high probability the text in the paper was copied from other sources and should be reviewed for plagiarism. The professor or instructor will contact the student if plagiarism is a concern.
DEPARTMENT RESOURCES

Production Forms, including Production Manual
http://www.regent.edu/acad/schcom/production/forms.htm

Equipment Reservation Form
http://www.regent.edu/acad/schcom/equipment/equipment_reservation_form.htm

UNIVERSITY POLICIES AND RESOURCES
Please review the following links for important information on University policies:

- Academic Calendar/Registrar Information
- Bookstore
- Honor/Plagiarism Policy
- Regent Library
- Student Services (includes links to student handbook, disability services, University calendar, University Writing Center, etc.)
- Technical Support – University Helpdesk
- Grading Policies (incompletes, extensions, IPs, etc.)
- Student Course Evaluations

DISABILITY STATEMENT:

The student is responsible for contacting director of student life at 757.352.4867 to request accommodations, provide necessary documentation, and make arrangements with each instructor. The following website is designed to help our disabled students learn of their rights and responsibilities with regards to disability services. The site also has resources for faculty to become better informed of their responsibilities towards the disabled students in their classes.
http://www.regent.edu/disabilities

STUDENT COURSE EVALUATION

Becoming Christian leaders includes learning how to evaluate others by providing honest evaluations that include positive affirmation and constructive feedback, as appropriate. In addition, such evaluation leads to the continual improvement of courses and student learning. Consequently, university policy requires that all students submit a formal student evaluation of teaching form at the end of the academic term. This mandatory requirement must be completed before students will be able to access their final course grade. This form is only available in an online format. Prior to the end of the course, students will receive an e-mail indicating that the form is available. Instructions on accessing the evaluation will be included. Since these evaluations are only available for a limited time, students should complete the evaluation as soon as they receive the e-mail notification that the evaluation form is available. Instructors will not have access to course evaluations until after grades have been submitted and will only have access to anonymous summary data. Students are also encouraged at any point during the term to offer comments that may be helpful to the improvement or refinement of the course. Students can access the online evaluation system at: http://eval.regent.edu/regentsurvey/students.cfm. If you have questions about the online evaluation please contact evaluation@regent.edu.
At times, due to unforeseen circumstances, course content may be subject to change. Please check with your professor to insure you have the most recently updated Syllabus for this course.