# **Course Syllabus - Spring 2014**

Course Title/Number: 3D Animation / IST 482

**Location**: Prichard Hall 200 **Times**: MW 1:00 pm - 2:15 pm

Instructor: Dr. Alice Lin Office: 346 Old Main Phone: (304) 696-6418 E-Mail: lina@marshall.edu

Office hours: MW: 2:20pm - 4:20pm

T R: 3:20pm – 4:20pm

Other times by appointment

**University Policies**: By enrolling in this course, you agree to the University Policies listed below. Please read the full text of each policy be going to <a href="www.marshall.edu/academic-affairs">www.marshall.edu/academic-affairs</a> and clicking on "Marshall University Policies." Or, you can access the policies directly by going to <a href="http://www.marshall.edu/academic-affairs/?page\_id=802">http://www.marshall.edu/academic-affairs/?page\_id=802</a>

Academic Dishonesty/ Excused Absence Policy for Undergraduates/ Computing Services Acceptable Use/ Inclement Weather/ Dead Week/ Students with Disabilities/ Academic Forgiveness/ Academic Probation and Suspension/ Academic Rights and Responsibilities of Students/ Affirmative Action/ Sexual Harassment

# **Course Description:**

Study of 3D as it relates to the basic principles of animation. Students will learn to create believable and natural animations using a combination of several different techniques including inverse kinematics, morphing, and key framing. Students experience the animation production process and are exposed to industry trends. Students work on projects creating 3D animations.

# **Reference Text:**

3D Animation Essentials Author: Andy Beane

Publisher: Sybex (March 6, 2012)

ISBN:978-1118147481

Introducing Character Animation with Blender, 2nd Edition

Author: Tony Mullen

Publisher: Sybex (April 26, 2011)

ISBN: 978-0470427378

## **Credit:**

The course is three (3) credit hours. It includes classroom lectures, exams and project assignments.

# **Course Student Learning Outcomes:**

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

- demonstrate an understanding of the animation production process.
- recognize and articulate the principles of animation.
- demonstrate an understanding of the 3D rendering process.
- using 3D animation tools to create 3D animation and short films.

## **How Practiced in this Course:**

In-class lectures, In-class examples, exams, and project.

## **How Assessed in this Course:**

Evaluation of student's performance will be based on the quality of your performance on Project and exams.

# **Grading Policy:**

Midterm Exam - 20% Final Exam - 30% Project - 50%

Final letter grades are determined based on the following grading scale:

90-100% A 80-89% B 70-79% C 60-69% D Below 60 F

The instructor reserves the right to change these values depending on the overall class performance and/or extenuating circumstances.

### **Attendance Policy:**

Attendance is strongly encouraged. If you miss a class, it is your responsibility to catch up on material missed.

#### **Withdrawal Policy:**

The University withdrawal policy is followed in this course. The last day to drop an individual course for the Spring Semester is March 28, 2014.

### **Course Schedule:**

Please note this is a tentative schedule.

Week 1 1/13 Syllabus, Introduction, Technical Review
Week 2 1/20 Martin Luther King, Jr. Holiday, Interpolating Values

Week 3	1/27	Interpolation-Based Animation
Week 4	2/3	Interpolation-Based Animation
Week 5	2/10	Kinematic Linkages
Week 6	2/17	Motion Capture
Week 7	2/24	Physically Based Animation
Week 8	3/3	Fluids
Week 9	3/10	Exam
Week 10	3/17	Spring Break
Week 11	3/24	Modeling and Animating Human Figures
Week 12	3/31	Modeling and Animating Human Figures
Week 13	4/7	Facial Animation
Week 14	4/14	Modeling Behavior
Week 15	4/21	Special Models for Animation
Week 16	4/28	Dead Week
Week 17	5/5	Exam Day (May 6, 12:45pm - 2:45pm)