

THE ART INSTITUTE OF TAMPA
A BRANCH OF MIAMI INTERNATIONAL UNIVERSITY OF ART & DESIGN

MISSION STATEMENT

Miami International University of Art & Design is a multi-campus, career-oriented institution that provides students with academic preparation and practical skills through programs in the applied arts and design industries. The institution prepares its undergraduate students for entry-level positions and its graduate students for advancement in their chosen fields. The University is dedicated to fostering a culture that encourages creativity, research, and learning-centered endeavors.

COURSE SYLLABUS

Course Number: MAAA232
Course Title: 3D ANIMATION
Class Meetings: Room 232, Tuesday, 1PM – 5PM
Session / Year: Fall 2017
Instructor Name: Krishna M. Sadasivam
Email Address: krishna.at.ait@gmail.com
Telephone:
Office Hours: posted on sivamstudios.com/ait

Course Title: **3d Animation**
Course Description: Students are introduced to basic 3D animation techniques. Topics to be covered include hierarchical linking, keyframing, function curves, animated modifiers, basic morphing, animated cameras, and an introduction to character animation.

Course Length: 11 weeks

Contact Hours: 44 hours

Credit Values: 3 credits

Estimated Homework: 4 hours per week

Quarter Credit Hour Definition: A quarter hour of work is the equivalent of fifty (50) minutes of class time (often referred to as a “contact hour”) of instruction per week over the entire term. The credit hour is the unit by which the university measures its course work. The number of credit hours assigned to a course quantitatively reflects the outcomes expected, the mode of instruction, the amount of time spent in class, and the amount of outside preparatory work expected for class. The working understanding is that for every hour a student spends in class, the student will be assigned two hours of work outside the class.

Prerequisite(s): **MAAA213** *3D Modeling*

Learning Objectives:

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

Animate 3D objects using industry standard techniques

- Create 3D animations from real world reference
- Differentiate animation techniques and styles Apply appropriate animation techniques relative to project specifications
- Create animations that are effective in their use of geometry

Apply traditional animation concepts and techniques within a 3D environment

- Use storyboard techniques to plan animation
- Integrate traditional animation concepts into 3D animation as they apply to character performance

Create 3D animation

- Utilize the animation tools in a 3D software package
- Depict emotion and characterization through the utilization of effective animation techniques
- Stage an animation with objects and characters that are appropriate in scale

Instructional Materials and Reference:

Textbook(s):

Digital Character Animation 3 (No. 3). George Maestri, Publisher: New Riders Press. Updated edition, ISBN: 10: 0321376005

Technology Needed: Access to Autodesk Maya, Adobe After Effects. Either Window computers running XP or Macintosh computers running MacOS10.x with an Internet connection, printers, software including image manipulation, digital painting, 3D, & virus utilities. Students should have removable hard or flash drive for personal file storage.

Instructional Methods: Lectures, Demonstrations, In Class Animation, Animation critiques, and animation assignments

Grading Scale:

All assignments must have clear criteria and objectives. All students shall be treated equitably. It will be every student's right to know his or her grade at any reasonable time he or she requests it. The criteria for determining a student's grade shall be based on a percentage of total points, as follows:

93 – 100%	= A
90 – 92%	= A-
87 – 89%	= B+
83 – 86%	= B
80 – 82%	= B-
77 – 79%	= C+
73 – 76%	= C
70 – 72%	= C-
65 – 69%	= D+
60 – 64%	= D
0 – 59%	= F

Student Evaluation / Grading Policies:

The following assignments, projects, and exams fulfill the learning objectives for this course:

Ball Incline Animation	100 points
Bounce in Place Bounce Across Incline Roll	100 points
Obstacle Course Animation	100 points
Crane Project Animation	100 points
Platform Jumper Animation	100 points
Bony at the Bar Animation	100 points

Electronic Submission of Assignments:

Any assignments submitted to the instructor as electronic attachments to an email are the responsibility of the student. Instructor will acknowledge the receipt of the email to the student within 24 hours of receiving it. If the student does not receive an acknowledgement within 24 hours it is the student's responsibility to contact the instructor, otherwise it is assumed that the assignment has not been sent.

Students with Disabilities:

The University provides accommodations to qualified students with disabilities. The Student Affairs office assists qualified students with disabilities in acquiring reasonable and appropriate accommodations and in supporting equal access to services, programs and activities at the University.

Students who seek reasonable accommodations should notify the Dean of Student Affairs of their specific limitations and, if known, their specific requested accommodations. Students will be asked to supply medical documentation of the need for accommodation. Classroom accommodations are not retroactive, but are effective only upon the student sharing approved accommodations with the instructor. Therefore, students are encouraged to request accommodations as early as feasible with the Dean of Student Services to allow for time to gather necessary documentation. If you have a concern or complaint in this regard, please contact the Dean of Student Affairs in Room. Complaints will be handled in accordance with the school's Internal Grievance Procedure for Complaints of Discrimination and Harassment.

Course Attendance:

The University expects students to attend all scheduled meetings of each course. Students should be prepared to start the quarter on the first day of classes and to add/drop courses early in the first week of the quarter to minimize absences. Absences accrue against the student even if the student was not originally registered for the class but adds it after the start of classes.

Students who do not attend any of their classes during the Add/Drop will be withdrawn from the University. They must contact the Assistant Director of Readmissions to return.

Students must attend a minimum of nine classes per course in order to receive a passing grade in the course. The only exceptions to this policy are graduating seniors and university imposed closings for holidays.

Attending fewer than nine classes or 36 hours of course instruction will result in course failure unless the Dean of Academic Affairs determines that there are acceptable extenuating circumstances. Students should be prepared with written documentation of circumstances beyond their control that contributed to the absences for consideration by the Dean. If the student is allowed to remain in the class and receive a grade, there will need to be a description of appropriate make-up work from the respective Instructor. Please note that a student can withdraw from any class through the ninth week without receiving an "F." Course withdrawal forms must be submitted to the Registrar's Office by the close of business on Friday of week nine in order to receive a "W" grade. Holidays and official class cancellations do not count as absences.

REQUIREMENTS

1. Attend all class meetings, arrive on time, and stay for the duration of the class.
2. Faculty policies regarding attendance, tardiness arriving to class and returning from breaks, or leaving class early can be found in the course syllabus.
3. Students who violate the attendance policy will fail the course.

Consecutive Days Absence Policy

A student who is withdrawn for failure to attend any classes within a consecutive ten calendar day period may be permitted to apply for readmission into the subsequent quarter.

Students who miss ten consecutive calendar days may be withdrawn from the University and will receive W's for all courses, if the withdrawal occurs before the end of the ninth week of the quarter, or WF's for all courses, if the withdrawal occurs after the end of the ninth week of the quarter. Students who have been withdrawn due to violation of the consecutive absence policy but are still in good academic standing will be able to return the following quarter through the readmissions process. Students who have been withdrawn and the withdrawal results in a violation of the satisfactory academic progress policy (SAPP) must follow the procedure for appealing academic termination. See the Satisfactory Academic Progress section.

Academic Honesty:

The University does not tolerate plagiarism, cheating, copying or academic dishonesty in any form. Academic integrity policies apply to both the giver and receiver of information. Students who witness any act of academic dishonesty should report the incident to a faculty member, their Chair, or to another member of the University staff or administration immediately.

Saving Work:

It is the student's responsibility to save his or her work. The student should save and verify multiple copies prior to leaving the classroom. The teacher is in no way responsible for work saved on the hard drives, nor is he or she required to give an extension on work improperly saved. Local and network drives at the University, including all computers in the labs, will be purged regularly and should never be used by students for long-term storage. These drives are available for student use during class and lab sessions, but all data will be deleted on a daily basis. Students are expected to backup all work. Loss, theft, and computer failure are not acceptable excuses for not saving work.

Reminders:

Students wishing to withdraw from a course must do so before week nine. Students wishing to drop a course without penalty must do so the first week of class.

Library:

The Libraries on each campus are one of the most important resources available to students while attending the University. The Library supports learning and encourages intellectual curiosity among students and faculty. The Library staff works in cooperation with faculty to help students develop the ability to find, evaluate, and use information in order to become lifelong learners. To fulfill this mission, the Library develops and maintains a quality collection of books, periodicals, audiovisual materials, and online databases. The Library provides access to remote resources through Internet access and cooperative agreements with other libraries.

Week 1:

Weekly Objective: Understanding the Maya user interface

The 12 Principles of Animation

Maya's User Interface

Moving between views

The Hotbox

Maya's "modes"

Moving, Scaling, Rotating objects in Maya

Moving through the Interface

The Channel Box

Marking Menus

The Space Bar

The Mouse: Dolly, Tumble, and Move

What is a Node?

Setting Playback Speed

The Time and Range Slider

An Introduction to the Graph Editor

Staging, Pose to Pose, Timing and Ease-in / Ease-out

In class demos:

Ball Fall

Pendulum Swing

Setting Keyframes

Making a Playblast

Due Next Week: Ball Incline Animations

Week 2:

Weekly Objective: Working with the Graph Editor

How Splines Work

Splines and Spacing of Motion

Tangent Types (Spline, Linear, Clamped, Flat, Stepped, Plateau)

What is Overshoot? How to fix it?

Tangent Handles

Weighted and Non-Weighted Handles

When to Break Tangents

Handles vs Keys: Pros and Cons of Both Approaches

In class demos:

Bounce in Place
Bounce Across
Incline Roll

Due Next Week: Ball Incline Roll Animations

Week 3:

Weekly Objective: In-depth with Using the Graph Editor

Visual Tools
Muting and Unmuting Channels
Breakdown Keys
Value Operators
Buffer Curves
Auto Key vs the S Key
Obstacle Course Given

Due Next Week: Block out your keys for the Obstacle Course

Week 4:

Weekly Objective:

Copying Curves
Fixing Arcs in the Viewport (Editable Motion Trails)

Studio Time / One on One Help

Due Next Week: Obstacle Course

Week 5:

Weekly Objective:

Working with Constraints
Parenting
Constraining a Prop
Animating with Constraints

Due Next Week: Crane Project Keys Due

Week 6:

Weekly Objective:

Studio Time / One on One Help

Due Next Week: Crane Project Animation Due

Week 7:

Weekly Objective:

The Successive Breaking of Joints
Moving the Arm
Hand Raises
Hand to the Side
Moving the Foot
Blocking out your Shot
Zeroing out Poses
IK / FK
Head Turns

Due Next Week: Platform Jumper Keys Due

Week 8:

Weekly Objective:

Studio Time / One on One Help

Due Next Week: Platform Jumper Animation Due

Week 9:

Weekly Objective:

Critique and one-on-one help

Due Next Week: Bony at the Bar Keys Due

Week 10:

Weekly Objective:

studio time / one-on-one help / feedback

Due Next Week:

Week 11:

Weekly Objective:

Bony at the Bar animation due.

Final Class Presentations

Due Next Week:

PRACTICE, PRACTICE, PRACTICE!

IMPORTANT EVENTS!

SUMMER QUARTER REGISTRATION! – BEGINS May 9th! (Priority Registration)

Summer Quarter 2016 Registration begins week 6, the week of May 9th. The first week is for priority registration only, this means Honors Students and Veterans. All remaining students are able to start registration the following week, week 7. Advising will occur during week 5 of the quarter. Please see your Academic Department Director, Academic Adviser or your Faculty for information regarding your classes for the Summer 2016 Quarter. **REMEMBER: REGISTRATION HAPPENS WEEK 6!!**

PRESIDENT'S GALLERY – "Socks"

The President's Gallery for Spring 2016 will be based on the theme "socks." Submissions are due by the end of week 2, April 15th. The theme is a guideline for the work. Digital copies of work can be submitted for the gallery show, however if your work is selected, it will need to be printed. Standard format for this gallery show is 11"x17".

F*8 STUDENT SHOWCASE

F*8 Student Showcase will occur the 1st weekend of Summer 2016. We will be accepting submissions for the showcase up through week 10 of the Spring 2016 Quarter. All media is accepted for the festival. Submissions need to be handed in to Mr. Buffalo.

ATTENDANCE & GRADE POLICY CHANGES

Please review the new attendance and grading policies once again. The result of taking too many W's over your course of study here is exactly the same as the result for earning too many F's, **ACADEMIC TERMINATION. DON'T MISS CLASS.**

ASSESSMENT REVIEWS

Portfolio Assessment Reviews will be held during weeks 10 & 11. There have been some changes made to the assessment rubrics and the process. Please check with your instructors, assistant department chair or your academic department director for details. **Make sure to ask for a copy of the review rubrics for your assessment. This will let you know what will be required for the review and how you will be assessed.**

STUDENT / INSTRUCTOR CONTRACT (DUE AT THE BEGINNING OF CLASS ON WEEK 2)

I, _____, affirm that I have received the syllabus FX3001 for Spring Quarter 2016. Furthermore, I have read the content of this document and understand that I will be held accountable for the assignments and other required work for this class.

I understand that my instructor is available for help and will reach out for feedback, questions, and extra help. It is my responsibility to start the projects early and complete them in a timely manner.

I confirm that I have received the following documents:

- MAAA232 syllabus
- Class attendance policy
- Grading criteria
- Statement of Project dues dates and/or deadlines.
- Purchase requirements
- Overview of assignments and class schedule
- The website for the course assignments (<http://www.sivamstudios.com/ait>) and the instructor's contact information (krishna.at.ait@gmail.com)
- I understand that late work will not be graded and will result in a ZERO.

Signature

Date