

21839 - GAME 4633 – 001 - M01 Syllabus
3D Animation (GAME 4633)

Instructor: Jonathan Welch

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Class: 08:00 am - 10:50 am, TR, Norman Art Building 214, Jan 12, 2021 – May 04, 2021

Virtual Office Hours: (Blackboard IM): MWF 12:30 pm to 1:45 pm, TR 3:30 pm – 4:45 pm

<https://atu.webex.com/meet/jwelch13>

Office: 202 Rock House

Course Description:

This course builds upon the principles and fundamentals of 3D animation using animation software such as Autodesk's Maya. \$45 course fee.

Prerequisite: GAME 2003 and ART 3001 or permission of Department Head

Recommended Supplies: USB 3.0 External hard drive (preferred) or thumb drive, pen or pencil to write with.

Required Textbook: None

Required Software:



The software is available in 214 Norman Hall: M-TH 7:30 am-10 pm, F-7:30 am-5pm, Sat-10am-10 pm, and Sun-10 am-10 pm (excluding class times). After 5pm students must enter and exit through the McEver side card swipe entrance with their ID. It is **free to for students** to download and use, but you will have to register with Autodesk using your student email address. **Do not get 2020 or I will not be able to see some of your files and you will not be able to open them in the classroom.**

<https://www.autodesk.com/education/free-software/maya>

Webex Meetings & Webex Teams

<https://www.webex.com/downloads.html>

Justification of the Course: This course provides students with the knowledge necessary to produce 3d animation for game and film. This course will utilize various industry software(s) including: Autodesk Maya, Adobe After Effects, and Adobe Photoshop. The instructional methods of this course will include creative work, lectures, demonstrations, individual research, group critiques and presentations. Participation in all aspects is vital to the success of this course and will be an integral part of the student's final course evaluation.

Course Objectives: Upon successful completion of this course a student will be able to:

- Create smooth character animations that implement the 12 principles of animation and solid body mechanics.
- Develop and demonstrate intermediate knowledge of 3D animation and rigging software.
- Simulate standard industry pipeline and adhere to project briefings and requirements

Course Outline:

There will be 7-12 major projects in this course. Descriptions will be provided online for each upcoming assignment including requirements and due dates.

Assignments will be graded based upon the following criteria:

- Creativity – originality of concept and approach to problem solving
- Technique – ability to use the software effectively and execution of required elements
- Presentation – quality of written and spoken discussion of work, including participation in group critiques
- Process – demonstration of concept development through mid-progress critiques and sketchbook

Final Assessment:

Based on total points and protocol

A: 90-100 Exemplary performance in all aspects of course

B: 80- 89 Very Good performance on most course aspects

C: 70 - 79 Good or average performance overall

D: 60 -69 Unsatisfactory Performance

F: Failure

General Education Goals:

The general education curriculum is designed to provide a foundation for knowledge to educated people and to develop the capacity for an individual to expand that knowledge over his or her lifetime. Students who have completed the general education curriculum at Arkansas Tech University will be able to:

- a. Communicate effectively
- b. Think critically
- c. Develop ethical perspectives
- d. Apply scientific and quantitative reasoning
- e. Demonstrate knowledge of the arts and humanities
- f. Understand wellness concepts

Departmental Learning Goals:

1. **Critical Analysis** - Objectively participate in class critiques and constructive criticism.
2. **Communication** - Identify and effectively apply the use of visual arts concepts and vocabulary in verbal and written formats.
3. **Tools and Technology** - Demonstrate proficiency in the use of art tools, materials, and technology appropriate to the field.
4. **Content** - Demonstrate an understanding of contemporary art trends, major artist's works, and historical movements.
5. **Professionalism** - Demonstrate an understanding of professionalism required of a serious student of art and develop a substantive portfolio.
6. **Program Effectiveness**- Students are satisfied with the programs facilities, teachers and curriculum. Based on senior exit surveys for each art area in Graphic Design, Art Education and Fine Art.

Grading Scale:

- A: 90-100
- B: 80- 89
- C: 70 - 79
- D: 60 –69
- F: 59 and below

Classroom Behavior:

Each member of the Arkansas Tech University community is obliged to conduct her/himself in a non-disruptive manner in the classroom. If a student is being disruptive, the instructor will address the situation, discussing behavioral expectations moving forward, and emphasize possible consequences for failing to comply. If the disruptive behavior persists, the student may be suspended on an interim basis from the class. Instructors may report excessive and/or repeated disruptive behavior through the Procedures for Addressing Violations of Academic Integrity and Classroom Behavior. This process includes an appeals process students may use to challenge perceived violations or excessive penalties. Students who exhibit disruptive behavior may also be referred to the Department of Student Conduct (see Article III, Section C of the Arkansas Tech University Student Handbook).

If a classroom incident constitutes an emergency (e.g., any immediate threat to life and/or property) and requires an immediate response from police, fire or emergency medical services, please call 911.

Food is not allowed around computers or printing equipment! If your behavior is disruptive you will be asked to leave the class and you will be counted as absent. Essentially, **just try to be respectful of the instructor and your fellow classmates.**

Art Department Attendance Policy:

Attendance, Punctuality and Student Success – The Department of Art believes that attendance is a crucial component to student success and recommends:

1. That you be considerate of other students and your professor by arriving on time to class
2. Attend classes
3. Complete Assignments on Time

Attendance points will be given for each class. If you miss a class, it is your responsibility to find and complete all in-class work & assignments (on time). In-class work missed may not be made up.

MWF Classes: When more than 4 classes have been missed, student services will be alerted and they will contact you about your attendance.

:For more than 8 classes missed, the student will be dropped from the class and receive a failing grade (FE).

TR Classes: When more than 3 classes have been missed, student services will be alerted and they will contact you about your attendance.

:For more than 6 classes missed, the student will be dropped from the class and receive a failing grade (FE).

More than 3 late arrivals (+10 min. late) =one absence.

If you arrive more than 30 minutes late or leave 30+ minutes early you will be counted as absent for the class.

*Absence Exceptions: Students with documented medical conditions or emergencies who request an exception must notify the instructor or disability services ASAP and provide documentation upon their return to class. They will be reviewed on a case-by-case basis.

Students will not be counted absent for participating in ATU sanctioned events, official games, and field trips. ALL students missing for any reason are responsible for making up the work missed and turning their work in on time. You must notify me at least one class before the event.

COVID-19 Attendance Plan:

The recent outbreak of COVID-19 has forced changes in the logistics of public institutions. As a response, Arkansas Tech University has developed pandemic recovery framework to guide classroom management for Fall 2020 based upon scientific evidence provided by the U.S. Centers for Disease Control and Prevention (CDC) and the Arkansas Department of Health. To meet the guidelines, our class has to adapt our meeting times, seating, classroom preparation, and common area management to accommodate the new situation.

Our class is scheduled to **meet on Tuesday and Thursday between 8:00 am - 10:50 am in Norman Art Building 214**, Jan 12, 2021 - May 04, 2021.

We will be meeting virtually on the first day

(<https://atu.webex.com/atu/j.php?MTID=mcdd3313e1c41ad49c3996e5432457d09>). **DO NOT COME TO CLASS ON THE FIRST DAY.** After the first day we will be attending virtually or face-to-face based on groups.

You have been assigned a Group based on the class roster (see below).

Roster:

Group A	Group B
1. Bernardini, Mckenzie 2. Crutchfield, Kaylon 3. Greenawalt, Parker 4. Holt, Hayden 5. Johnson, Robert	1. Jones, Matt 2. Mizell, Christopher 3. Murdock, Andrew 4. Needles, Timothy 5. Reid, Makalyn

- If you are in **Group A** we will be **MEETING** on **TUESDAY**. **You are expected to log into the webcast on THURSDAY** (I will be taking roll). Friday is a work day. Students planning to show up on Friday must sign up for a seat, otherwise they will have the option to join via web (see below).
- If you are in **Group B** we will be **MEETING** on **THURSDAY**. **You are expected to log into the webcast on TUESDAY** (I will be taking roll). Friday is a work day. Students planning to show up on Friday must sign up for a seat, otherwise they will have the option to join via web:
 - Meeting
link: <https://atu.webex.com/atu/j.php?MTID=mcdd3313e1c41ad49c3996e5432457d09>
 - Meeting number: 177 345 4513
 - Password: ruHsaeP35y3
 - Join by video system
 - Dial 1770939097@atu.webex.com
 - You can also dial 173.243.2.68 and enter your meeting number.
 - Join by phone
 - +1-469-210-7159 United States Toll (Dallas)
 - +1-415-655-0001 US Toll
 - Access code: 177 345 4513
- **Maintain 6 feet distance** in the hall outside the classroom, as you enter, and inside the classroom.
- You are assigned a **computer** based on your **number** (see attached map).
- Our classroom is **Norman 214**. All students must properly **wear a mask** at all times while on campus. There will be sanitary wipes on the scanner to the right of the door (see attached map).
- Use hand sanitizer to cleanse your hands. **Grab (1) sanitary wipe as you enter the classroom.** Go to your station, and use the wipe to **sanitize your station**.
- I will be available to by **web during office hours** <https://atu.webex.com/meet/jwelch13>
- If your live **connection is interrupted** or connection speed makes the images or audio unintelligible **email me** at jwelch@atu.edu, and **complete the lesson from the instructions and video in BlackBoard**.

Building Safety:

Norman Hall has extended hours that provide additional studio time for art students. Those hours are M-TH 7:30am-10pm, F-7:30am-5pm, Sat-10am-10pm and Sun-10am-10pm. After 5pm students must enter and exit through the McEver side card swipe entrance with their ID. During those hours, a building and or lab monitor is present for additional safety. These monitors are here to support this extra studio and lab time, please be courteous and respectful of their job. Failure to follow the rules (including refusing to leave when the building is closing) may result in your lab privileges being revoked, your project receiving a failing grade and/or the Campus Police being notified to escort you out of the building.

COVID-19 Considerations:

In order to help keep our ATU community safe, healthy, and to prevent the spread of COVID-19, students must follow several steps:

- 1) Masks must be worn by all students in public spaces, including classrooms and laboratories. Any student showing up for class without a mask will be given the opportunity to retrieve one. Entry into classrooms and laboratories without a mask will be prohibited. Please refer to the guidance from CDC as to the proper use of cloth masks (<https://www.cdc.gov/coronavirus/2019-ncov/prevent-gettingsick/how-to-wear-cloth-face-coverings.html>). Note that CDC does not recommend the use of a face shield in the place of a cloth mask (<https://www.cdc.gov/coronavirus/2019-ncov/prevent-gettingsick/cloth-face-cover-guidance.html>).
- 2) All students are required to participate in a daily health self-screen (<https://www.atu.edu/pandemicrecovery/student-healthscreening.php>). For students commuting to campus, please complete before coming to campus. For residential students, please complete each day before leaving your residence hall. If you do not own a thermometer, please have your temperature taken at one of the temperature testing sites listed in the student health screening document and repeated below:
 - Department of Public Safety available beginning July 6th (716 N El Paso Avenue); Monday-Friday; 8am-5pm
 - Health and Wellness Center available beginning August 3rd (outdoor tent station by north entrance of Doc Bryan Student Services Center); Monday-Friday; 8am-5pm
 - University Commons Clubhouse available beginning August 10th; Monday-Friday; 8am-10pm and Sunday; 5pm-10pm 3.
- 3) All students must maintain at least 6 feet of distance from every person present in all instructional spaces used in this course (classrooms, laboratories, etc.).
- 4) Any student who tests positive for COVID-19 is asked to self-report to the ATU Health and Wellness Center by calling (479) 968-0329 or sending email to hwc@atu.edu. Doing so will allow the university to communicate directly with others who might have been exposed to the virus and take any appropriate cleaning and sanitizing measures.

Students are expected to abide by the above steps per the Student Handbook section on Classroom Behavior. For more information about ATU COVID-19 policies, please refer to the ATU Pandemic Framework

(<https://www.atu.edu/pandemicrecovery/docs/Pandemic%20Framework2020.pdf>) as well as the University's Pandemic Recovery webpage (<https://www.atu.edu/pandemicrecovery/>).

If you have any questions, please do not hesitate to contact the Dean of your respective college. Thank you for your continued commitment to Arkansas Tech University.

Academic Dishonesty:

A university exists for the purpose of educating students and granting degrees to all students who complete graduation requirements. Therefore, Arkansas Tech University requires the highest standards of academic integrity and conduct from all students. Students at Arkansas Tech University will refrain from committing any of the violations of academic integrity as detailed below. Furthermore, Arkansas Tech University expects that all classes maintain an academic and courteous atmosphere. Both the professor and students are responsible for creating an environment that enables all students to reach their academic potential. The classroom is under the control of the professor who will give students a statement of his or her classroom expectations and policies in a syllabus at the beginning of the semester. The term "classroom" as used in this Academic Integrity Policy includes face-to-face, hybrid and online classes. It is not restricted to classrooms on or off campus but also includes playing fields and laboratories, as well as University computer areas on or off campus as well as field trips associated with class-related matters. Students will conduct themselves in a non-disruptive and civil manner when attending classes and other events associated with Arkansas Tech University.

*The full Academic Integrity code can be found at <https://www.atu.edu/academic-integrity/>

Diversity and Inclusion:

Arkansas Tech University does not discriminate on the basis of color, sex, sexual orientation, gender identity, race, age, national origin, religion, veteran status, genetic information, or disability in any of our practices, policies, or procedures. If you have experienced any form of discrimination or harassment, including sexual misconduct (e.g. sexual assault, sexual harassment, and stalking, domestic or dating violence), we encourage you to report this to the institution. If you report such as incident of misconduct to a faculty or staff member, they are required by law to notify Arkansas Tech University's Title IX Coordinator, and share the basic fact of your experience with them. The Title IX Coordinator will then be available to assist you in understanding all of your options and in connecting you with all possible resources on and off campus. For more information please visit:

<http://www.atu.edu/titleix/index.php>

Accommodations:

Arkansas Tech University values diversity and inclusion and is committed to a climate of mutual respect and full participation of all students. My goal is to create a learning environment that is useable, equitable, inclusive and welcoming. If there are aspects of the instruction or design of this course that result in barriers to your inclusion or prevent an accurate assessment of your achievement, please meet with me privately to discuss your needs and concerns. You may also contact the Office of Disability Services, located in Doc Bryan Student Center, Suite 141, in person, via phone at (479) 968-0302 or TTY (479) 964-3290, via email at disabilities@atu.edu, or visit their website at <https://www.atu.edu/disabilities/index.php> in order to initiate a request for accommodations.

Privacy and Accessibility:

Policies The link below is a comprehensive list of all Privacy and Accessibility policies for software and services on Arkansas Tech's Blackboard server. https://www.atu.edu/etech/privacy_accessibility.php

***Instructor reserves the right of flexibility. This syllabus is subject to change as individual and class needs dictate. Students will be given adequate notice of changes made.**

Class Schedule:

- **Week 1 01/11 - 01/15**
 - "Introduction" & "Assignment 1 Intro" Videos
 - **Assignment 01 - Animation Experiment DUE Date 01/15**
 - "Assignment 2 Intro" Video
 - [Angry Animator's Bouncing Ball Tutorial](#)
- **Week 2 01/18 - 01/22**
 - **Assignment 02 - Bouncing Ball DUE Date 01/18**
 - "Assignment 3 Intro" Video
 - "FK Controls and Relationships" Video
 - "IK Leg Setup" Video
- **Week 3 01/25 - 01/29**
 - "IK Foot Setup" Video
 - "Blendshapes and Skinning" Video
- **Week 4 02/01 - 02/05**
 - **Assignment 03 - Human Biped Rig DUE Date 02/01**
 - "Assignment 4 Intro" Video
 - "Blocking and Polishing" Video
 - [Sir Wade Neistadt's "Animation Blocking and Finding Key Poses w/ Reference"](#) Video
- **Week 5 02/08 - 02/12**
 - **Assignment 04 - Side Step DUE Date 02/08**
 - "Assignment 5 Intro" Video
- **Week 6 02/15 - 02/18**
 - **Assignment 05 - Walk Cycle DUE Date 02/15**
 - "Assignment 6 Intro" Video
- **Week 7 02/22 - 02/26**
 - **Assignment 06 - Body Emotion Poses DUE Date 02/22**
 - "Practical Exam 1 Review" Videos
 - **Practical Exam 1 DUE Date 02/22**
- **Week 8 03/01 - 03/05**
 - "Assignment 7 Intro" Video
 - "Alan Becker's Animating Walk Cycles" Video
- **Week 9 03/08 - 03/12**
 - **Assignment 07 – Full Body Walk Cycle DUE 03/08**

- Week 10 03/15 - 03/19
 - “Assignment 8 Intro” Video
 - “Alan Becker’s Animating Run Cycles” Video
- Week 11 03/22 - 03/26
 - **Spring Break**
- Week 12 03/29 - 04/02
 - **Assignment 08 – Run Cycle DUE 03/29**
 - “Assignment 9 Intro” Video
 - “How to Animate Part 1” Video
- Week 13 04/05 - 04/09
 - “How to Animate Part 2” Video
 - “How to Animate Part 3” Video
- Week 14 04/12 - 04/16
 - “How to Animate Part 4” Video
- Week 15 04/19 - 04/23
 - “Discussions Thread and Peer Critique” Video
 - **Assignment 9 – Athletic Action DUE 04/19**
 - **Assignment 9 Animation Discussions Thread DUE 04/19**
- Week 16 04/26 - 04/30
 - **Peer Critiques on Discussion Forum DUE 04/26**

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Rubric:

Digital 3D Foundations: Assignment Expectations and Grading Rubric

Assignment	% of the final
Assignments	70%
Discussion Posts	15%
Discussion Feedback	15%
Total	100%

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DIGITAL 3D FOUNDATIONS (GAME 4633) Syllabus Acknowledgment

I _____ have full read, understand, and agree to all the terms of the syllabus. I also acknowledge that the schedule and syllabus is subject to change based on the faculty discretion.

Signature _____ Date ____/____/____