

**San José State University**  
**College of Humanities and the Arts/Animation/Illustration**  
**ANI-51A Sec 02 (47583) - Intro 3D Modeling , Fall 2018**

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<b>Office Hours:</b>	Tu Th 1:00 PM- 1:30 PM
<b>Class Days/Time:</b>	Tu Th 8:00 AM- 10:50PM
<b>Classroom:</b>	Art 222

### **Course Description**

The primary goal of this class will to teach the student 3D modeling as practiced in industry today. These methods will be applicable to all fields of the industry.

At the conclusion of this course, the student will be prepared for an internship, or possibly an entry level position depending on the student's focus and dedication. The student should have a basic understanding of working in a production pipeline/environment and two solid portfolio pieces. they should also feel comfortable creating almost any representational, non-organic object in 3D.

Our main software will be Autodesk's Maya, but the principals and practices could easily be applied to any other 3D modeling package. Maya is not only a 3D modeling program, but it is also a "hub" program. All things in production go in and come out from Maya.

While our main focus will be modeling and Maya, we will need to support our Maya endeavors with Adobe Photoshop, as well as, other programs.

Because of the nature of 3D, we will of necessity, have to spend lots of time on "technique" to arrive at realistic results.

This should never distract you from your primary mission to create good art! You will utilize all of your art training and add to it in this class.

There is no room to hide in 3D land! Your knowledge and depiction of form must be accurate as well as your breakdown and reproduction of the surface qualities of an object and how it interacts with light. There are no shadowy areas with which to hide your lack of understanding of light and form!

Part of operating within a professional environment is the ability to accurately re-create the object you are given, whether it be realistically or whimsically, you must map to the reference as exactly as possible!

## **Course Goals and Student Learning Objectives**

(Insert goals and objectives here. Objectives must be measurable, specific, and time related. Sequential numeration of GE/SJSU studies learning outcomes followed by course learning outcomes.)

Learn to use Autodesk Maya (or really any 3D package) to recreate non-organic objects in 3D.

Learn to use ancillary programs, such as Adobe Photoshop, and ND02., to aid in the creation of textured models that replicate the look and fidelity of the reference given.

Learn skills and working methods/ethos of industry pipelines, to create professional content that could be used in games or cinema and to do so in a timely fashion, while under pressure.

## **Course Content Learning Outcomes**

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

LO1 - Model using a 3D package, any non-organic object in 3D, using current industry practices.

LO2 - Create custom UV Mapping coordinates to facilitate the application of textures to their 3D objects.

LO3 - Create custom textures in both Maya and Photoshop, that will be applied to their 3D models, making them appear realistic.

LO4 - Prepare their 3D object and export it into a game engine.

LO5 - Create appropriate presentation materials to show case their work in a professional portfolio/reel.

## **Suggested Texts/Readings**

### **Textbook**

**Digital Modeling**, by William Vaughan

This book will sustain you for ANI 51A and ANI 130A and ANI 130B

**ISBN-10:** 0321700899

**Autodesk Maya 2018**, by Kelly Murdock

**ISBN-10:** 978 -1-63057-112-2

## **Other equipment / material requirements**

As part of the SJSU Animation/Illustration program, in this class, as well as every other, it is expected that you possess the Adobe Creative Suite and will utilize it at some point in executing your projects for this class. It should be installed on your laptop along with the Microsoft Office Suite.

You can legally download the software from  
<http://its.sjsu.edu/services/software/microsoft-students/index.html>  
<http://its.sjsu.edu/services/software/adobe/index.html>

We will also be using Maya 2018. You can download it from  
<https://www.autodesk.com/education/free-software/featured>

We will be using Google Drive to move files back and forth from the class room to home.

## **Library Liaison**

The Library Liaison for Animation is Rebecca Kohn.

She can be reached via email at [rebecca.kohn@sjsu.edu](mailto:rebecca.kohn@sjsu.edu)  
or by telephone at (408)808 - 2007.

Her office is located on the 4th floor of King Library, and she encourages students to contact her with research questions.

Library Resources specific to animation are available online at  
<http://libguides.sjsu.edu/animation>

All of the University Library Resources can be accessed at  
<http://libguides.sjsu.edu/a-z>

## **Classroom Protocol**

- Be on time.
- Do not use computers during lectures.
- Clean up the class room the last 5 minutes of class.
- Respect other students when they have the floor. Kind of like kindergarten but with bigger computers.
- Turn off your cell phone. No cell phone, Ipod, or musical device usage in the classroom. If you need to use your phone go outside the class room.
- Private conversations during lectures and class discussions are not permitted.
- Clean the sinks if you use them for your project clean ups. Do not discard paper towels on the floor.
- Do not use the tabletops as a cutting surface.

## Assignments and Grading Policy

Assignments	40.00%
Class Project progress	20.00%
Class Participation	10.00%
Final	30.00%
<b>Total</b>	<b>100%</b>

- **Grading information:**

The Tutorials or book lessons and the class participation will be graded differently than the assignments. The assignments make up your base grade and are the most important! The book lessons and the class participation scores will adjust your assignment grade up or down.

### Grading Percentage Breakdown

94% and above	A
93% - 90%	A-
89% - 87%	B+
86% - 84%	B
83% - 80%	B-
79% - 77%	C+
76% - 74%	C
73% - 70%	C-
69% - 67%	D+
66% - 64%	D
63% - 60%	D-
<b>below 60%</b>	<b>F</b>

**Below I have broken down how I arrive at my grades. This should serve mainly to help you understand the priorities I place on different aspects of my grading evaluation.**

**Modeling will be judged on form and edge flow.**

**After the interductory projects I will grade equally the modeling, the color map implementation , the spec map implementation and artistic merit.**

### **Modeling, Color map and Spec map.**

- How closely does the final product match the concept art, reference, or general idea of the project as described to you? This is by far the most important criteria. All else can somewhat be forgiven, but you must meet the visual expectations!
- Does it look realistic and/or convincing for its intended function? If the concept art was unclear or inaccurate, have those deficiencies been corrected in a way that passes muster? Your audience should be unaware of any deviation and be visually convinced of the soundness of your asset.
- Edge flow will be a major factor in achieving full credit for modeling.

### **Artistic Merit:**

- Does the final product transcend the media?
- Is there any kind of wow factor, especially in light of limitations and difficulties of 3D?
- How well has the scene been lit.

**Each of the four categories will be heavily influenced by the following factors:**

**a. Completeness and Pipeline/Feedback ready:**

- Does it look finished by measure of the examples of the instructor's and previous students work as shown? In the case of the industry, there will be plenty of in-house work and work being done by other studios, by which to judge the merits of your work.
- Is it finished enough to receive appropriate feedback for the stage of development, whether WIP or finish. Even something that is WIP, should still be "done" enough to allow for feedback at certain points in the process.
- Is it ready to hand off, or is there some re-work necessary? It must be clean and ready for someone else to work on at all points in the process!

**b. Implementation of Directions:**

- Does the work show that the procedures and working methods in the lecture and the lecture notes were followed and implemented correctly? Or in the industry, that your studio's practices were implemented?
- Were things submitted correctly? For class this means placed on the server in the right folder, using Maya project folders and having trimmed them appropriately.
- Was the naming convention adhered to?
- Were the correct type of files used and placed in the right folders?

**c. Penalty (if any) for late or missed work:** Work is considered late if it is not on the server before the published deadline on canvas. **Work Turned late is an Automatic 10% reduction in your grade.**

The only exception will be if you have **PRIOR** to class contacted me and **RECEIVED** my **APPROVAL** for a late submission. Sending me an email a half an hour before class and not getting a reply from me does not count!

**d. Extra Credit and Redos:** There may be opportunity for extra credit to be earned and for assignments to be resubmitted. This will be up to my discretion and should not be relied on to improve your grade.

**e. Family Emergencies and other Crisis's:** All family emergencies or other life crisis's will require a doctor's note for verification. I will work with any student to adjust the curriculum to take into account any authenticated emergency. If possible all efforts should be made to notify in advance.

It is expected that some form of communication in a timely fashion will be received by me regarding any difficulties. Do not drop out for weeks at a time and then expect to

return to class without some notice of your difficulties.

Also, if you are feeling overwhelmed with school, please let me know and or seek out help at Student Services. I am happy to try and work something out, but you have to let me know! You are here to learn, not to suffer!

**e. Incompletes:** I will only give out an incomplete if you have or are experiencing a compelling family emergency and/or life crisis. You have to complete the work on your own and have one year to submit all final materials for consideration or your grade reverts to an F.

## **University Policies**

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Per University Policy S16-9, university-wide policy information relevant to all courses, such as academic integrity, accommodations, etc. will be available on Office of Graduate and Undergraduate Programs' Syllabus Information web page at <http://www.sjsu.edu/gup/syllabusinfo/>

Make sure to review these university policies and resources.

### **Student Technology Resources**

Computer labs for student use are available in the [Academic Success Center](#) at <http://www.sjsu.edu/at/asc/> located on the 1st floor of Clark Hall and in the Associated Students Lab on the 2nd floor of the Student Union. Additional computer labs may be available in your department/college. Computers are also available in the Martin Luther King Library. A wide variety of audio-visual equipment is available for student checkout from Media Services located in IRC 112. These items include DV and HD digital camcorders; digital still cameras; video, slide and overhead projectors; DVD, CD, and audiotape players; sound systems, wireless microphones, projection screens and monitors.

### **Google Drive**

You will submit your work on Google Drive. Use your SJSU email. It gives you unlimited data storage.

### **Groups you need to join!**

[http://groups.yahoo.com/group/SJSU\\_Animation\\_Illustration/](http://groups.yahoo.com/group/SJSU_Animation_Illustration/)

All animation students in 114 and above should be members of this group

## Web sites of interest...

A good place to go for tutorials and plugins.

<http://www.highend3d.com/>

A great forum for discussions, tutorials and help, especially help!

[www.cgtalk.com](http://www.cgtalk.com)

Good discussions on rigs and such...

<http://www.tweakcg.com/forum/>

Great site, lots of industry pros posting work.

<http://www.creaturetd.com/forums/portal.php>

Obviously not Maya-centric but has a lot of cool stuff, interviews with people working in movies and such, also lots of indirect Maya discussions.

<http://www.zbrushcentral.com/zbc/index.php>

## ANI 51A -03 Introduction to 3D Modeling

week	Details
1	<a href="#">Model with Color Map</a>
2	<a href="#">Creating your own door</a>
3	<a href="#">Creating the Door Frame</a>
4 Tue	<a href="#">Wk04 Progress Check</a>
4 Thur	<a href="#">Front Door and Frame</a>
5 Tue	<a href="#">WK05 Progress check</a>
5 Thur	<a href="#">The Object Model</a>
6 Tue	<a href="#">Wk06 Progress check</a>
6 Thur	<a href="#">Lighting, Rendering, Spec and A0</a>

<b>week</b>	<b>Details</b>
<b>7 Tue</b>	<a href="#"><u>Wk07 Progress check</u></a>
<b>7 Thur</b>	<a href="#"><u>Clean Up Doors and Objects</u></a>
<b>8 Tue</b>	<a href="#"><u>Wk08 Progress Check</u></a>
<b>8 Thur</b>	<a href="#"><u>Block In and Test paint</u></a>
<b>9 Tue</b>	<a href="#"><u>WK09 Progress Check</u></a>
<b>9 Thur</b>	<a href="#"><u>Finish painting and texturing all walls</u></a>
<b>10 Tue</b>	<a href="#"><u>WK10 Progress Check</u></a>
<b>10 Thur</b>	<a href="#"><u>Clean Up and Combine Maps</u></a>
<b>11 Tue</b>	<a href="#"><u>WK11 Progress Check</u></a>
<b>11 Thur</b>	<a href="#"><u>House Edge Cleanup and Next Phase</u></a>
<b>12 Tue</b>	<a href="#"><u>Wk12 Progress Check</u></a>
<b>Final Examination</b>	<a href="#"><u>Final due by 9:45am</u></a>

**Note:** All dates and assignments are subject to change! This is a tentative schedule designed to provide you with some basic guidance. Please do not make travel plans, etc. without first consulting me as to the state of the schedule!