San José State University  
College of Humanities and the Arts/Animation/Illustration  
44846, Digital Modeling, ANI 130a-02, Fall 2017

Instructor: Tom Austin  
Office Location: ART 215  
Telephone: TBA  
Email: Tom Austin@yahoo.com  
Office Hours: TuTh 1130 – 12:00, 3:00 -3:30  
Class Days/Time: TuTh 12:00 – 2:50 PM  
Classroom: Art 222

Course Description

The goal of this class will be to introduce the student to more advanced Maya methods used to create characters.

In 51 you learned (hopefully!) the basics of polygon modeling. Most of your modeling to date should largely have been creating non-organic objects. Now you will focus on organic modeling.

This course will be a broad survey of character modeling and will require us to use programs other than Maya, our main focus. Maya is really a "hub" program. All things in production go in and come out of Maya, but we also need to learn and use others to support our Maya efforts. Primarily we will be using Photoshop. It is expected that you should have at least a glancing familiarity with that program. In addition, we will begin using ZBrush. It is not expected that you have any experience with the program and much class time will be spent its introduction and use.

At the end of the day, even if you fully intend to pursue concept or story there will be value in this class. First of all many leading studios use 3D programs in their visual development and story boarding. Secondly your experience modeling a character will better inform your designs in the future. You will have gained experience in modeling that will help you avoid common mistakes that can lead to designs that complicate the efforts of modeling departments.

We will concentrate on the human figure and how to model it for games and animated features.
Course Goals and Student Learning Objectives

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, Zbrush and Substance Painter 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 Learning Outcomes (CLO)
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 showcase their work in a professional portfolio/reel.

Required Texts/Readings/Software
Textbook
Digital Modeling, William Vaughan

ISBN-10: 0321700899

Other Readings

This book has a tremendous information especially for sculpting clothing and we will reference a lot. It's not required but highly recommended.
**ZBrush Studio Projects: Realistic Game Characters**, Ryan Kingslien

**ISBN-10:** 047087256X

This is one of my favorite books especially when working between Zbrush and Maya.

**ZBrush Book–Digital Sculpting Human Anatomy**, Scott Spencer

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**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 and Maya 2016.

http://its.sjsu.edu/services/software/microsoft-students/index.html
http://its.sjsu.edu/services/software/adobe/index.html
https://www.autodesk.com/education/free-software/maya

You need to buy a Wacom Cintiq Pen. Hey have them at student bookstore

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**Classroom Protocol**

- No use of cell phones in class. If you need to make a call or txt please step outside,
- Cell phones need to be off of the desk top.

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**Dropping and Adding**

Students are responsible for understanding the policies and procedures about add/drop, grade forgiveness, etc. Refer to the current semester’s Catalog Policies section at http://info.sjsu.edu/static/catalog/policies.html. Add/drop deadlines can be found on the current academic calendar web page located at http://www.sjsu.edu/academic_programs/calendars/academic_calendar/. The Late Drop Policy is available at http://www.sjsu.edu/aars/policies/latedrops/policy/. Students should be aware of the current deadlines and penalties for dropping classes.
Information about the latest changes and news is available at the Advising Hub at http://www.sjsu.edu/advising/.

Assignments and Grading Policy

<table>
<thead>
<tr>
<th>Assignment Type</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>Assignments</td>
<td>40.00%</td>
</tr>
<tr>
<td>Assignment Progress</td>
<td>20.00%</td>
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<tr>
<td>Class Participation</td>
<td>10.00%</td>
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<tr>
<td>Final</td>
<td>30.00%</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
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- **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

<table>
<thead>
<tr>
<th>Grade Range</th>
<th>Grade</th>
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<tbody>
<tr>
<td>94% and above</td>
<td>A</td>
</tr>
<tr>
<td>93% - 90%</td>
<td>A-</td>
</tr>
<tr>
<td>89% - 87%</td>
<td>B+</td>
</tr>
<tr>
<td>86% - 84%</td>
<td>B</td>
</tr>
<tr>
<td>83% - 80%</td>
<td>B-</td>
</tr>
<tr>
<td>79% - 77%</td>
<td>C+</td>
</tr>
<tr>
<td>76% - 74%</td>
<td>C</td>
</tr>
<tr>
<td>73% - 70%</td>
<td>C-</td>
</tr>
<tr>
<td>69% - 67%</td>
<td>D+</td>
</tr>
<tr>
<td>66% - 64%</td>
<td>D</td>
</tr>
<tr>
<td>63% - 60%</td>
<td>D-</td>
</tr>
<tr>
<td><strong>below 60%</strong></td>
<td><strong>F</strong></td>
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</tbody>
</table>

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.

Production: 50%

- 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.

Completeness and Pipeline/Feedback ready: 30%
• 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 studious, 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!

**Implementation of Directions: 20%**

• 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?

**Artistic Merit: + modifier** (this provides a little bump for your grade if it meets this criteria)

• Does the final product transcend the media?

• Is there any kind of wow factor, especially in light of limitations and difficulties of 3D?

**b. Penalty (if any) for late or missed work:**

a 10% reduction in 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!

**c. 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.

**d. 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

CHEATING

Don’t do it! You are required to create your own content from scratch in this class, it is completely IMPERMISSABLE to copy, reference, borrow, or otherwise use another student’s work or something you scrounged up on the internet and attempt to pass it off as your own work!!!

Maya has DNA. Everything you create has a finger print and if I get wind of anyone cheating, I will immediately, bring action against the transgressor. At the very least you will fail my class and at worst you could possibly be expelled from the university! See below...

Academic integrity

Your commitment as a student to learning is evidenced by your enrollment at San Jose State University. The University’s Academic Integrity policy, located at http://www.sjsu.edu/senate/S07-2.htm, requires you to be honest in all your academic course work. Faculty members are required to report all infractions to the office of Student Conduct and Ethical Development. The Student Conduct and Ethical Development website is available at http://www.sjsu.edu/studentconduct/.

 Instances of academic dishonesty will not be tolerated. Cheating on exams or plagiarism (presenting the work of another as your own, or the use of another person’s ideas without giving proper credit) will result in a failing grade and sanctions by the University. For this class, all assignments are to be completed by the individual student unless otherwise specified. If you would like to include your assignment or any material you have submitted, or plan to submit for another class, please note that SJSU’s Academic Policy S07-2 requires approval of instructors.

Campus Policy in Compliance with the American Disabilities Act

If you need course adaptations or accommodations because of a disability, or if you need to make special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible, or see me during office hours. Presidential Directive 97-03 requires that students with disabilities requesting accommodations must register with the Disability Resource Center (DRC) at http://www.drc.sjsu.edu/ to establish a record of their disability.
Misc.

Google Drive.

You will submit your work via Google Drive unless otherwise directed.

Groups you need to join!

This one is mandatory for my class!

http://groups.yahoo.com/group/SJSU_Animation_Illustration/

All animation students in 114 and above should be members of this group for ACME Transmission Updates

http://groups.yahoo.com/group/SJSU_ACME/

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

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.

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topics, Readings, Assignments, Deadlines</th>
</tr>
</thead>
</table>
| 1    | 08/24/17   | First day of class. Handle add/drops, review green sheet, etc.  
|      |            | Take individual pictures for modeling.  
|      |            | Read the file [Modeling the head.pdf](Modeling%20the%20head.pdf).  
|      |            | Read chapter 9 modeling the head.  
|      |            | Create Eye Ball  
|      |            | Assign Creating the Ear |
| 2    | 08/28/17   | Modeling Eyes, Ear, UV maps. Maya, Zbrush  
|      |            | Progress points for Ear - Tu  
|      |            | Zbrush sketchbook, Ear due - Th |
| 3    | 09/04/17   | Modeling Head, Eyes, Ear. Maya, UV maps, Zbrush  
|      |            | Progress points for Head- Tu  
|      |            | Zbrush sketchbook, Head due- Th |
| 4    | 09/11/17   | Paint Sculpt / Texture in Zbrush. Finish head  
|      |            | Progress points for Colored Head - Tu  
|      |            | Finished head due - Th |
| 5    | 09/18/17   | Finish hair finish individual head, Maya, Zbrush  
<p>|      |            | Individual head with Hair, Zbrush Sketchbook due Thur. |</p>
<table>
<thead>
<tr>
<th>#</th>
<th>Date</th>
<th>Task Description</th>
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</thead>
<tbody>
<tr>
<td>6</td>
<td>09/25/17</td>
<td>Start Model Character head/ helmet</td>
</tr>
<tr>
<td>7</td>
<td>10/02/17</td>
<td>Color Head</td>
</tr>
<tr>
<td>8</td>
<td>10/09/17</td>
<td>Head due Start Hands/Gloves</td>
</tr>
<tr>
<td>9</td>
<td>10/16/17</td>
<td>Hand/Gloves due start Torso /Upper Body</td>
</tr>
<tr>
<td>10</td>
<td>10/23/17</td>
<td>Upper Torso due start Lower Body</td>
</tr>
<tr>
<td>11</td>
<td>10/30/17</td>
<td>Full body due start Model Hair/ or Weapon/ item</td>
</tr>
<tr>
<td>12</td>
<td>11/06/17</td>
<td>Work on hair</td>
</tr>
<tr>
<td>13</td>
<td>11/13/17</td>
<td>Hair due</td>
</tr>
<tr>
<td>14</td>
<td>11/13/17</td>
<td>Ncloth/ texture cloth in Zbrush</td>
</tr>
<tr>
<td>14</td>
<td>11/20/17</td>
<td>Check Progress Thanksgiving break</td>
</tr>
<tr>
<td>14</td>
<td>11/27/17</td>
<td>Posing the character due, Zbrush Sketchbook due Thur</td>
</tr>
<tr>
<td>16</td>
<td>12/04/17</td>
<td>Cloth due / full Crit</td>
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<tr>
<td></td>
<td></td>
<td>Zbrush Sketchbook due Thur</td>
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<tr>
<td>17</td>
<td>12/11/17</td>
<td>Polish</td>
</tr>
<tr>
<td>18</td>
<td>12/15/17</td>
<td>Final Exam</td>
</tr>
</tbody>
</table>
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!