Course and Contact Information

Instructor: Tom C. Austin
Office Location: Art 213
Telephone: TBA
Email: tom.austin@sjsu.edu
Office Hours: TuTh 12 Noon – 12:30 PM
Class Days/Time: TuTh 8:00AM - 10:50AM
Classroom: Art 222
Prerequisites: ANI 141

Course Format

Important Web Pages and Class Messaging

ANI Program Google group (mandatory for ANI students): www.shmgoogle.com
Facebook group. Shrunkenheadman Modelers
https://www.facebook.com/groups/1667821660114613/

Course Description (Required)

Advanced level 3D digital modeling techniques using current industry standard software for the creation of 3D digital models. Students re-investigate the character pipeline with focus on human characters with complicated costuming and accessories.

Course Goals (Optional)

Advance the students understanding Autodesk Maya to create organic and hard edge objects in 3D. Emphasis will be placed on hand painted textures encountered in many AAA games.

Advance the students understanding of 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. This semester we will model and pose a cinematic asset. The character should be whimsical, or highly stylized, such as you might find at Dream Works, Blue Sky, etc.
Characters will be taken from ANI117 and the BFA Viz Dev sections from last semester. Students could use their own characters from these classes if approved by the teacher.
As a second project we will work on an environment piece suitable for an AAA game project. We will concentrate on hand painted texture pieces utilizing several different techniques. If successful the piece could be used next spring to enter the Blizzard Internship competition.

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) (Required)**

CLO1 - Model using a 3D package, any organic or non-organic object in 3D, using current industry practices.
CLO2 - Create custom UV Mapping coordinates to facilitate the application of textures to their 3D objects.
CLO3 - Create custom textures in both Maya and Photoshop, that will be applied to their 3D models, making them appear realistic.
CLO4 - Apply ancillary programs and techniques required for realizing your work, like exporting to a video game, etc.
CLO6 – Be able to create a hand painted look for texture maps
CLO6 - Create appropriate presentation materials to show case their work in a professional portfolio/reel.

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

Create believable organic and hard surface models of any scope.

**Required Texts/Readings**

**Textbook**

none

**Other Readings**

**Digital Modeling**, William Vaughan

*ISBN-10: 0321700899*

**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

**Other technology requirements / equipment / material**

Cintiq Pen
Course Requirements and Assignments

“Success in this course is based on the expectation that students will spend, for each unit of credit, a minimum of 45 hours over the length of the course (normally three hours per unit per week) for instruction, preparation/studying, or course related activities, including but not limited to internships, labs, and clinical practica. Other course structures will have equivalent workload expectations as described in the syllabus.”

Final Examination or Evaluation

Final Exam will consist of a final project to be screened on the last day of class. Attendance is mandatory and arrangements must be made with instructor prior to final exam/screening date if student will miss the final.

The scheduled final for ANI114 Spring 2019 is:

May 17, 2018 07:15-09:30 AM

Grading Information (Required)

Grades will be assigned according to University policy from A through F as outlined in the SJSU catalog. All work must be finished and turned in by deadlines. In keeping with established professional standards any work missing the deadline will receive a failing grade.

Work will be given on Thursdays. By the following Tuesday the student will be expected to have attempted all facets of the assignment and points will be given on the success of the attempt. The purpose of this is to uncover any parts of the assignment that the student does not understand and be able to correct in class for a successful completion the following Thursday.

Tuesday's work must be complete at the beginning of class.
Thursday's work is due 15 minutes after class starts. Late work will be accepted until the following Tuesday at 11:59 pm but will receive a 10% penalty.

Arrangements must be made well in advance with the instructor for deadline extensions or none shall be granted. In most instances, the student will still have to turn in the work on time. All emergencies will be dealt with on an individual basis. Students with an unforeseen emergency must be prepared to furnish the appropriate paperwork justifying the absence from the class.
Determination of Grades

<table>
<thead>
<tr>
<th></th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Assignments</td>
<td>40%</td>
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<tr>
<td>Class Project progress</td>
<td>20%</td>
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<tr>
<td>Class Participation</td>
<td>10%</td>
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<tr>
<td>Final</td>
<td>30%</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
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A grades indicate excellent work.
B grades indicate above average work.
C grades indicate average work.
D grades indicate below average work.
F grades are failing.

- A plus = 100% to 97%
- A = 96% to 93%
- A minus = 92% to 90%
- B plus = 89% to 87%
- B = 86% to 83%
- B minus = 82% to 80%
- C plus = 79% to 77%
- C = 76% to 73%
- C minus = 72% to 70%
- D plus = 69% to 67%
- D = 66% to 63%
- D minus = 62% to 60%
- F = 59% to 0%
Classroom Protocol

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

Animation/Illustration Program Policies

- Students must arrive to class on time with materials ready to work.
- Cell phones must be silenced.
- Private conversations during lectures and class discussions are not permitted.
- No checking email or using laptops for activities unrelated to the class.
- No playing personal audio through speakers, use headphones only.
- Do not prop open any doors.
- Do not leave valuable items unattended.
- Do not leave the classroom without cleaning your area.
- Be courteous to others, keep private conversations quiet.
- Aromatic foods are not allowed in any of the classrooms or labs.
- Please be attentive to your personal hygiene.

Computer Labs: Violation of rules will result in loss of lab access for the whole semester

- No food or beverages by the workstations.
- Do not change the connections on the equipment.
- Do not move any equipment in the lab.
- No traditional painting.

University Policies (Required)

Per University Policy S16-9 (http://www.sjsu.edu/senate/docs/S16-9.pdf), relevant information to all courses, such as academic integrity, accommodations, dropping and adding, consent for recording of class, etc. is available on Office of Graduate and Undergraduate Programs’ Syllabus Information web page at http://www.sjsu.edu/gup/syllabusinfo/

Academic Integrity policy (Academic Senate Policy F15-7)
"The University’s Academic Integrity policy, located at http://www.sjsu.edu/senate/docs/S07-2.pdf, 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 https://www.sjsu.edu/studentconduct/"
Instances of academic dishonesty will not be tolerated by the Animation/Illustration program. Cheating on exams, plagiarism, presenting the work of another as your own, or the use of another person’s ideas without giving proper credit will result in AUTOMATIC EXPULSION FROM AND FAILURE OF THE COURSE, with possible expulsion from the Animation/Illustration Major. A second offense will result in IMMEDIATE EXPULSION from the Animation/Illustration Major.

This includes but is not limited to copying someone else’s imagery, altering someone else’s imagery, altering a pre-existing 3D model, tracing or copying animation, and submitting someone else’s notes for a grade.
<table>
<thead>
<tr>
<th>Week (Optional)</th>
<th>Date</th>
<th>Topics, Readings, Assignments, Deadlines</th>
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</thead>
</table>
|               | 01/21/20  | **Tue.** Introduce class. Assign Ear and Eyeball  
| 1             | 01/23/20  | **Thur.** Introduce project. Show viz dev from 117 and BFA for possible modeling choices. Give option to use they’re own character. Character choices due by end of class. Review character selections. Demo creating the head for character. Kittleson Video. Assign Head Blank. Due Tuesday. Introduce Zbrush Sketch concept. First sculpt due following Thursday  
| 1             | 01/28/20  | **Tue.** Crit and grade Head from last Thursday.  
| 2             | 01/30/20  | **Thur.** Review Zbrush Sketch book. Give credit where due. Review Heads, give critiques. Assign Blank for Body. Finished Head and Body Blanks due Tue. Make sure Body Blanks take in to account edges for Clothing  
| 3             | 02/04/20  | **Tue.** Introduce Zbrush sculpt for head Demo key points of the Head and how they apply to non-representational model. Assign Head Sculpt due the following Tue.  
| 3             | 02/06/20  | **Thur.** Review Zbrush Sketch book. Give credit where due. Review Heads, give critiques. Demo Sculpt Ideas for hair and painting of Head  
| 4             | 02/11/20  | **Tue.** Crit Head Sculpt. Corrections Due Thur. Demo Extracting Clothing. Assign Body Sculpt and Skin painting due following Tue. Assign First Pass Clothing Extraction; due Tue. Modify Body Blanks in Maya to account for Clothing  
| 5             | 02/20/20  | **Tue.** Crit and Grade Body Paint. Crit First Pass Clothing  
| 5             | 02/20/20  | **Thur.** Review Zbrush Sketch book. Give credit where due. Final clothing due next Tuesday Sculpt Wrinkles  
| 6             | 02/25/20  | **Tue.** Critique clothing Sculpt  
| 6             | 02/27/20  | **Thur.** Review Zbrush Sketch book. Give credit where due. Assign Painting and Posing  
| 7             | 03/04/20  | **Tue.** Assign Turn print out and Paint over, (or bringing character back to Maya for lighting and rendering)  
| 7             | 03/06/20  | **Thur.** Review Zbrush Sketch book. Give credit where due.  
| 8             | 03/10/20  | **Tue.** Character Assignment Due. Crit and Grade  
| 8             | 03/12/20  | **Thur.** Review Zbrush Sketch book. Give credit where due.  
| 9             | 03/17/20  | **Tue.** Take best Zbrush Sculpt and re-topo. Convert to Maya  
| 9             | 03/20/20  | **Thur.** Assign Landscape assignment create building orthos  

Digital Modeling II, Ani - 142, Spring, 2020
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<tr>
<th></th>
<th>Date</th>
<th>Day</th>
<th>Activity</th>
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<tbody>
<tr>
<td>10</td>
<td>03/24/20</td>
<td>Tue</td>
<td>Critique building Ortho. Start modeling</td>
</tr>
<tr>
<td>10</td>
<td>03/26/20</td>
<td>Thur</td>
<td>Zbrush Tile assignment</td>
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<tr>
<td>11</td>
<td>03/31/20</td>
<td>Tue</td>
<td>Spring Break No Class</td>
</tr>
<tr>
<td>11</td>
<td>04/02/20</td>
<td>Thur</td>
<td>Spring Break No Class</td>
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<tr>
<td>12</td>
<td>04/07/20</td>
<td>Tue</td>
<td>Start tile from Photoshop</td>
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<tr>
<td>12</td>
<td>04/09/20</td>
<td>Thur</td>
<td>Zbrush Sketch book</td>
</tr>
<tr>
<td>13</td>
<td>04/14/20</td>
<td>Tue</td>
<td>Critique tiles on Maya Model. Start tile from Zbrush</td>
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<tr>
<td>13</td>
<td>04/16/20</td>
<td>Thur</td>
<td>Zbrush Sketch book</td>
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<tr>
<td>14</td>
<td>04/21/20</td>
<td>Tue</td>
<td>Critique Maya Model. Start tile from PhotoImages</td>
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<td>14</td>
<td>04/23/20</td>
<td>Thur</td>
<td>Zbrush Sketch book</td>
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<tr>
<td>15</td>
<td>04/28/20</td>
<td>Tue</td>
<td>Critique tiles on Maya Model. Create Lighting</td>
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<td>15</td>
<td>05/01/20</td>
<td>Thur</td>
<td>Zbrush Sketch book</td>
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<tr>
<td>16</td>
<td>05/05/20</td>
<td>Tue</td>
<td>Critique lighting build render layers</td>
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<tr>
<td>16</td>
<td>05/07/20</td>
<td>Thur</td>
<td>Zbrush Sketch book Last Class. Final Crit</td>
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<td></td>
<td>05/17/20</td>
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<td>Final Exam 07:15-09:30 AM</td>
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