San José State University
College of Humanities and the Arts/Animation and Illustration
41897, Digital Modeling I, 01, Fall, 2017

Course and Contact Information

Instructor: Dave Gustlin
Office Location: Art 218
Telephone: (408) 924-4661
Email: Use CANVAS to email
Office Hours: MoWe 11:30 AM - 12:00 PM
Class Days/Time: MoWe 3:00PM - 5:50PM
Classroom: Art 222

Course Description

We will continue to improve all of the foundation modeling and texturing skills we learned in 51A. We will shift our focus from non-organic objects to modeling organic objects, with all the inherent challenges implicit in those shapes.

We will create a costumed character, model, texture, and prepare it for implementation in a video game engine.

We will also create a turnaround, stand-alone movies to showcase our models.

As part of this new pipeline, we learn spend a lot of time learning ZBrush. ZBrush will allow us to create organic shapes and details for our models, to heighten their fidelity.

We will also learn about deformation in greater detail, and how we need to prepare our model for animation.

We will learn a little bit of rigging to allow us to pose and correct our characters as necessary.
Course Learning Outcomes (CLO)

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

CLO1 - Model organic objects

CLO2 - Character modeling pipeline as practiced in the video game industry

CLO3 - ZBrush

CLO4 – Maya “brush based” work flow

CLO5 - Advanced UV Mapping, including “pelt mapping”

CLO6 - Digital sculpting

CLO7 - Re-topologizing

CLO8 - Maya to ZBrush pipeline

CLO9 - Edge looping for deformation

CLO10 - Unreal engine, game implementation

CLO11 - Understanding wrinkles anatomy and reproducing “edited” version

CLO12 - Processing high rez pixel based imagery for textures

CLO13 - Basic rigging, weight painting, and corrective shapes
Required Texts/Readings

Textbook
None.

Other technology requirements / equipment / material
It is not necessary to have any equipment for this class. The lab has all the equipment you need.

I do not recommend that you use any kind of Macbook, or Apple laptop to do your work. The migration of files over to the PC side with Maya tends to lead to corruption of the files.

Course Requirements and Assignments

- Office of Graduate and Undergraduate Programs’ Syllabus Information web page at http://www.sjsu.edu/gup/syllabusinfo/

“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 3 hours per unit per week with 1 of the hours used for lecture) for instruction or preparation/studying or course related activities including but not limited to internships, labs, clinical practica. Other course structures will have equivalent workload expectations as described in the syllabus.”

Regular attendance for this class is critical. Since we are not using a text, ALL of the information will be presented in lecture format. Recordings of these lectures will be available for reference, **BUT should not be used as a substitute for regular attendance!**

Additionally, as the semester progresses, the assignments will be more cumulative in nature. Failing to attend and falling behind will make it very difficult to make up. Of course, exception and accommodation will be made for illness, etc.

It is very important to come and listen, take notes, and participate in class discussions and critiques. There is lots to be learned both formally and informally. I advise you not to discriminate in where and when your place your attention.

The Shrunken Head Man Club puts on a number of events during the semester. Students are encouraged to attend all events and be as active as they can be with SHM. A big part of your college experience will come from these events.

There are at least 2-3 events a semester, that involve artists and leading industry companies coming to campus. These events will be highlighted and their importance made known well in advance! Every encouragement will be made that students attend these events. I will subsequently be giving a light workload when they occur, freeing time for student attendance.
Grading Information

Every assignment will have a rubric associated with it, that will break down the grading, and give a detailed explanation for each portion that is being assessed. It will also assign a point total for each part, giving the student a clear idea of the weighting. An example is shown below.

Penalty for late or missed work: Work is considered late if it is not posted on CANVAS and/or the server before class starts! Always turn in what you have no matter how atrocious! Not turning in anything is an automatic F!! You will be graded down half a grade for late work, i.e. - if you earned a B, you would get a B-.

Re-dos and extra Credit: There will be no re-dos and no extra credit, with the exception of the "Final" submissions for each assignment. I will accept re-dos for these assignments, up until the end of the semester. However, it will be on the student to make me aware of and re-sub and adjustment of the grade as appropriate.

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!

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.

Grades: I will make every effort to have your grades updated daily/weekly on CANVAS, allowing you to stay up to date.

Grade Weighting: Your semester work, will comprise 80% or your grade with the other 20% representing your final assignment. The weight of individual assignment will vary from standard to double, with double being reserved for the final turn in. Some of the earlier assignment will receive only a half weighting. This is designed
to graduate the weighting to ease the student into the curriculum and not penalize them early as they get their "sea legs" under them.

**Classroom Protocol**

I expect you to be on time and ready to work when class starts. All work due that day should be posted on CANVAS and on the server. Please do not wait until the last minute.

When I am lecturing I expect complete attention! I want all eyes on me. Using your cell phone at this time or accessing the internet on your computer is prohibited! During breaks and during lab time, it is acceptable to use socially media as long as it does not interrupt class.

Do not use lecture/crit time in class to hide in the back of the class and try to finish your work. This is a poor use of your time.

The taking of attendance will commence at the start time of class. I will call out your name several times and look for you in the classroom. If you are present raise your hand and say in a loud voice, “here!” If I receive no response, and I am unable to locate you visually, I will mark you absent. If you come in late, I will adjust the absent to a late. There will be no revisions of this record, period.

**University Policies**

**General Expectations, Rights and Responsibilities of the Student**

As members of the academic community, students accept both the rights and responsibilities incumbent upon all members of the institution. Students are encouraged to familiarize themselves with SJSU’s policies and practices pertaining to the procedures to follow if and when questions or concerns about a class arises. See University Policy S90–5 at [http://www.sjsu.edu/senate/docs/S90-5.pdf](http://www.sjsu.edu/senate/docs/S90-5.pdf). More detailed information on a variety of related topics is available in the [SJSU catalog](http://info.sjsu.edu/web-dbgen/narr/catalog/rec-12234.12506.html). In general, it is recommended that students begin by seeking clarification or discussing concerns with their instructor. If such conversation is not possible, or if it does not serve to address the issue, it is recommended that the student contact the Department Chair as a next step.

**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](http://info.sjsu.edu/static/catalog/policies.html) section at [http://info.sjsu.edu/static/catalog/policies.html](http://info.sjsu.edu/static/catalog/policies.html). Add/drop deadlines can be found on the current academic year calendars document on the [Academic Calendars webpage](http://www.sjsu.edu/provost/services/academic_calendars/). The [Late Drop Policy](http://www.sjsu.edu/aars/policies/latedrops/policy/) is available at [http://www.sjsu.edu/aars/policies/latedrops/policy/](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](http://www.sjsu.edu/advising/).

**Consent for Recording of Class and Public Sharing of Instructor Material**

[University Policy S12-7](http://www.sjsu.edu/senate/docs/S12-7.pdf), requires students to obtain instructor’s permission to record the course and the following items to be included in the syllabus:

- “Common courtesy and professional behavior dictate that you notify someone when you are recording him/her. You must obtain the instructor’s permission to make audio or video recordings in this class.
Such permission allows the recordings to be used for your private, study purposes only. The recordings are the intellectual property of the instructor; you have not been given any rights to reproduce or distribute the material.”
  o It is suggested that the green sheet include the instructor’s process for granting permission, whether in writing or orally and whether for the whole semester or on a class by class basis.
  o In classes where active participation of students or guests may be on the recording, permission of those students or guests should be obtained as well.

  “Course material developed by the instructor is the intellectual property of the instructor and cannot be shared publicly without his/her approval. You may not publicly share or upload instructor generated material for this course such as exam questions, lecture notes, or homework solutions without instructor consent.”

**CHEATING**

Don’t do it! You are required to create your own content from scratch in this class, it is completely **IMPERMISSIBLE** 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 fingerprint 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 Academic Integrity Policy S07-2](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](http://www.sjsu.edu/studentconduct/) is available at [http://www.sjsu.edu/studentconduct/](http://www.sjsu.edu/studentconduct/).

**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](http://www.sjsu.edu/president/docs/directives/PD_1997-03.pdf) requires that students with disabilities requesting accommodations must register with the [Accessible Education Center (AEC)](http://www.sjsu.edu/aec) at [http://www.sjsu.edu/aec](http://www.sjsu.edu/aec) to establish a record of their disability.

**Student Technology Resources**

Computer labs for student use are available in the [Academic Success Center](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.
SJSU Peer Connections

Peer Connections, a campus-wide resource for mentoring and tutoring, strives to inspire students to develop their potential as independent learners while they learn to successfully navigate through their university experience. You are encouraged to take advantage of their services which include course-content based tutoring, enhanced study and time management skills, more effective critical thinking strategies, decision making and problem-solving abilities, and campus resource referrals.

In addition to offering small group, individual, and drop-in tutoring for a number of undergraduate courses, consultation with mentors is available on a drop-in or by appointment basis. Workshops are offered on a wide variety of topics including preparing for the Writing Skills Test (WST), improving your learning and memory, alleviating procrastination, surviving your first semester at SJSU, and other related topics. A computer lab and study space are also available for student use in Room 600 of Student Services Center (SSC).

Peer Connections is located in three locations: SSC, Room 600 (10th Street Garage on the corner of 10th and San Fernando Street), at the 1st floor entrance of Clark Hall, and in the Living Learning Center (LLC) in Campus Village Housing Building B. Visit Peer Connections website at http://peerconnections.sjsu.edu for more information.

SJSU Writing Center

The SJSU Writing Center is located in Clark Hall, Suite 126. All Writing Specialists have gone through a rigorous hiring process, and they are well trained to assist all students at all levels within all disciplines to become better writers. In addition to one-on-one tutoring services, the Writing Center also offers workshops every semester on a variety of writing topics. To make an appointment or to refer to the numerous online resources offered through the Writing Center, visit the Writing Center website at http://www.sjsu.edu/writingcenter. For additional resources and updated information, follow the Writing Center on Twitter and become a fan of the SJSU Writing Center on Facebook. (Note: You need to have a QR Reader to scan this code.)

SJSU Counseling Services

The SJSU Counseling Services is located on the corner of 7th Street and San Fernando Street, in Room 201, Administration Building. Professional psychologists, social workers, and counselors are available to provide consultations on issues of student mental health, campus climate or psychological and academic issues on an individual, couple, or group basis. To schedule an appointment or learn more information, visit Counseling Services website at http://www.sjsu.edu/counseling.
# Course Schedule

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<th>Week</th>
<th>Date</th>
<th>Topics, Readings, Assignments, Deadlines</th>
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<tr>
<td>1</td>
<td>08-21-17</td>
<td></td>
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<tr>
<td>1</td>
<td>08-23-17</td>
<td>First Day of Instruction. Assign: BobaFett_eyepiece</td>
</tr>
<tr>
<td>2</td>
<td>08-28-17</td>
<td>Due: BobaFett_eyepiece.</td>
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<tr>
<td>2</td>
<td>08-30-17</td>
<td>Lec: NURBs. Assign: BobaFett_helmet</td>
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<tr>
<td>3</td>
<td>09-04-17</td>
<td>Labor Day, no class.</td>
</tr>
<tr>
<td>3</td>
<td>09-06-17</td>
<td>Due: BobaFett_helmet. Lec: UV Mapping</td>
</tr>
<tr>
<td>4</td>
<td>09-11-17</td>
<td>Due: BobaFett_UVs. Lec: Substance Painter. Assign: BobaFett_SP</td>
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<tr>
<td>4</td>
<td>09-13-17</td>
<td>Due: BobaFett_SP.</td>
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<tr>
<td>5</td>
<td>09-18-17</td>
<td>Due: BobaFett_FNL.</td>
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<tr>
<td>5</td>
<td>09-20-17</td>
<td>Lec: ZBrush. Assign: equineDigit_bones</td>
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<tr>
<td>6</td>
<td>09-25-17</td>
<td>Due: equineDigit_bones</td>
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<td>6</td>
<td>09-27-17</td>
<td>Lec: NURBs. Assign: equineDigit_surface</td>
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<tr>
<td>7</td>
<td>10-02-17</td>
<td>Due: equineDigit_surface</td>
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<td>7</td>
<td>10-04-17</td>
<td>Assign: equineDigit_hoof.</td>
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<tr>
<td>8</td>
<td>10-09-17</td>
<td>Due: equineDigit_hoof.</td>
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<td>10-11-17</td>
<td>Assign: equineDigit_ligamentae.</td>
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<td>9</td>
<td>10-16-17</td>
<td>Due: equineDigit_ligamentae.</td>
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<td>9</td>
<td>10-18-17</td>
<td>Due: equineDigit_FNL</td>
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<tr>
<td>10</td>
<td>10-23-17</td>
<td>Group Proj.</td>
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<td>Group Proj.</td>
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<td>14</td>
<td>11-22-17</td>
<td>Thanksgiving</td>
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<td>Week</td>
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<td>15</td>
<td>11-27-17</td>
<td>Group Proj.</td>
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<td>11-29-17</td>
<td>Group Proj.</td>
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<tr>
<td>16</td>
<td>12-11-17</td>
<td>Last Day of Instruction.</td>
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<tr>
<td>Final Exam</td>
<td>12-13-17</td>
<td>1215-1430, ART 222</td>
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