San José State University
College of Humanities and the Arts/Animation and Illustration
42776, Digital Modeling I, 01, Fall, 2015

Course and Contact Information

Instructor: Dave Gustlin
Office Location: Art 218
Telephone: (408) 924-4661
Email: Use CANVAS to email
Office Hours: TuTh 11:00AM - 11:30AM
Class Days/Time: TuTh 8:00AM - 10:50AM
Classroom: Art 222

Course Description

The goal of this class will be to introduce the student to more advanced Maya methods used in games to create characters. All of the techniques are equally applicable to film.

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.

You will also be introduced to the idea of a production pipeline. This will expose the students to a variety of jobs and specializations, that they may previously been unaware existed and reinforce the importance of producing quality products, so that people downstream aren't plagued by your sloppy modeling, etc.

This broad survey will require us to use some other programs other than Maya, which will be our main focus. Maya is really a "hub" program. All things in production go in and come out from Maya, but we also need to learn/use other programs 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 are familiar with that program and much class time will be spent familiarizing you with it.

At the end of the day, even if you fully intend to be a concept artist there will be value in this class. First and foremost, many leading studios (like DREAMWORKS!) won't even hire concept artists who don't know 3D! Secondly, at the very least your experience modeling a character will better inform your designs in the future. You will have some experience modeling and will avoid some common poor 3D designs.

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.
My understanding of how light works and how to render objects in traditional methods have been advanced exponentially through my exposure to 3D.

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!

**Learning Outcomes**

Extend 3D knowledge and learn how to model ever more complicated objects/characters, while working in a industry pipeline and have resulting content showcased in a game, or like professional destination.

**Course Learning Outcomes (CLO)**

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

CLO1 - Learn more advanced techniques to model organic volumes as related to clothing and human anatomy.

CLO2 - Learn a new software package, ZBrush, to create realistic surface details and encode those in maps/textures, that will be used by a game engine to replicate those details on the game character model.

CLO3 - Learn more advanced UV Mapping techniques.

CLO4 - Follow the game character pipeline from start to finish, including exporting game asset to stand alone model viewer.

CLO5 - Package up asset and post on asset library for use by animators and others at SJSU.

**Required Texts/Readings**

**Textbook**

**Digital Modeling**, by William Vaughan

![Digital Modeling](image)

**ISBN-10**: 0321700899

**Other Readings**
ZBrush Studio Projects: Realistic Game Characters

ISBN-10: 047087256X

Course Requirements and Assignments

SJSU classes are designed such that in order to be successful, it is expected that students will spend a minimum of forty-five hours for each unit of credit (normally three hours per unit per week), including preparing for class, participating in course activities, completing assignments, and so on. More details about student workload can be found in University Policy S12-3 at http://www.sjsu.edu/senate/docs/S12-3.pdf.

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.

Grading Policy

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?

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:** You 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.

**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. More detailed information on a variety of related topics is available in the **SJSU catalog**, at 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** section at 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** at http://www.sjsu.edu/provost/services/academic_calendars/. 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/.
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.”
  - It is suggested that the greensheet 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.
  - 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.”

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 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 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 at 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) at 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 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.

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.
List the agenda for the semester including when and where the final exam will be held. Indicate the schedule is subject to change with fair notice and how the notice will be made available.

### Course Schedule

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