### Course: ART 634



## Title: COMPUTER GRAPHICS I: 3D COMPUTER GRAPHICS

### **Course Description**

Students explore three-dimensional digital design techniques, concepts and applications employed as tools in graphic design. Students focus on three-dimensional modeling and rendering techniques in the creation of objects and environments for graphics and multimedia.

#### **Units/Transferability**

Transferrable to CSU

### Prerequisites/Co-requisites/Advisories

Prerequisite: Art 633 No Corequisites. No Advisories.

### **Course Student Learning Outcomes**

SLO 1: The student will successfully employ principles and elements of 3D design to create an geometric environment.

SO 2: The student will successfully employ principles and elements of 3D design to create an organic form.

# **Grading Scale or Criteria**

A - Excellent

- B Good
- C Satisfactory
- D Less than satisfactory

F - Failing P - Pass; at least equivalent to a "C" grade or better NP - Not Pass; equal to "D" or "F" grade

#### **Drop and Repeats**

Effective July 1, 2012 students are allowed three (3) attempts to pass a single class within the Los Angeles Community College District. If a student gets a "W", "D", "F", or "NP" as a grade in a class, that counts as an attempt. If you think you will not be able to complete this course with a C or better, please drop by the due date.

For all important dates make sure to visit http://www.lacitycollege.edu/services/admissions/dates.html

#### **Attendance Policy**

Students who are registered and miss the first time the class meets may lose their right to a place in the class. Whenever students are absent more hours than the number of hours the class meets per week, the instructor may exclude them from class. If the instructor determines that there are no mitigating circumstances that may justify the absences, the instructor may exclude a student from the class. Students are responsible for officially dropping a class that they stop attending.

#### **Financial Aid**

If you need help paying for books and other college expenses, call the Financial Aid Office at (323) 953-4000 ext.2010 or email finaid@lacitycollege.edu.

### Accommodations

Students with a verified disability who may need authorized accommodation(s) for this class are encouraged to notify the instructor and the Office of Special Services (323-953-4000, ext.2270 or email oss@lacitycollege.edu) as soon as possible, and at least two weeks before any exam or quiz. All information will remain confidential.

#### **Student Code of Conduct**

Violations of academic integrity include, but are not limited to, the following actions: cheating on an exam, plagiarism, working together on an assignment, paper or project when the instructor has specifically stated students should not do so, submitting the same term paper to more than one instructor, or allowing another individual to assume one's identity for the purpose of enhancing one's grade (see LACCD Board Rule 9803.28). Penalties may include a grade of zero or "F" on an exam or paper, or even suspension from the College.

Classroom & meeting time: CHEM 210 Mondays & Wednesdays 3:30pm-5:40pm Professor's Name: Oscar M Santos Office Hours& Location: Mondays and Wednesdays 5:40-6:00pm in CHEM 210 Office Telephone: TBD Email: santosom@lacitycollege.edu

# Additional Course Information:

This course will cover 3D rendering skills using Sketchup and Maya. Various techniques will be covered to prepare 3D objects for use in motion graphics, print and production visualization. Students will create a portfolio of work centered that showcases and develops their skills in 3D rendering.

**Course Materials:** Weblinks and handouts will be provided in class. Lessons can be found at artsandjustice.org You must have a FLASH DRIVE to turn in your work. You must have SKETCHBOOK for drawing (any size).

# Submission of Work:

Work will either be handed in person or through the class server. See handouts on website. All projects and file names must be CORRECTLY LABELED and be in the correct FILE FORMAT **ex: "LastName\_FirstName\_NameOfProject.filetype"** \*\*\*Incorrectly labeled work receives ZERO credit. \*\*\*Late work receives HALF CREDIT

# **Grading Breakdown:**

7 Projects (10 points each) - 70pts Mid-Term Project - 20pts Final Project - 20pts Participation in Class Critiques - 30pts Total Points - 140pts *(Total points may change depending on class progress)* 

**Classroom Behavior:** Disobedient, disruptive or disorderly behavior exhibited by any student may result in disciplinary action in accordance with District policies and procedures. Action may include, but is not limited to expulsion from class. (See LACC Board Rule 91101 in catalogue)

# Important Dates/Deadlines:

First Day of Classes: Monday, February 6, 2017 Last Day to Drop for Refund: Monday, February 20, 2017 Last Day to Drop without Fee & without a "W": Monday, February 20, 2017

Last Day to Add Classes: Thursday, February 16, 2017 Census Date: Tuesday, February 21, 2017 Last Day to File Pass/No Pass: Friday, March 10, 2017 Spring 2017 Graduation Petitions accepted without a Graduation Evaluation by an Academic Counselor Monday, August 29, 2016 - Friday, October 28, 2016 Late Spring 2017 Graduation Petitions accepted with a Graduation Evaluation by an Academic Counselor Monday, October 31, 2016 - Friday, April 14, 2017 Late Spring 2017 Graduation Petitions accepted with a Graduation Evaluation by an Academic Counselor Monday, October 31, 2016 - Friday, April 14, 2017 Late Spring 2017 Graduation Petitions accepted with a Graduation Evaluation by an Academic Counselor. Participation in the graduation ceremony is not guaranteed.

# Please check with Admissions.

Monday, April 17, 2017 - Monday, June 5, 2017 Last Day to Drop with a "W": Sunday, May 7, 2017 Final Exam Schedule: May 30, 2017 - June 5, 2017 Graduation Ceremony Date: To Be Determined Grades Due: Monday, June 12, 2017 HOLIDAYS/NON-INSTRUCTION:

Presidents' Holiday : February 17 - February 20, 2017 Non-Instruction Day : Thursday, March 30, 2017 Cesar Chavez Holiday: Friday, March 31, 2017 Spring Break: April 1, 2017 - April 7, 2017 Non-Instruction Day: Sunday, April 16, 2017 Memorial Day: Monday, May 29, 2017

| CLASS DATE                            | LECTURE + LAB   | PROJECTS   |
|---------------------------------------|---|--|
| 1- 2/6                                | <ul> <li>Introduction to class, syllabus<br/>and schedule</li> <li>3D workflow/pipeline</li> <li>Sketchup Basics - Interface,<br/>shortcuts, basic shapes,<br/>views</li> </ul> | Sketchup introduction and basics   |
| 2- 2/8                                | <ul> <li>Sketchup basics continued-<br/>views, components, groups</li> <li>Materials</li> <li>Building a basic piece of<br/>furniture</li> </ul>                                | <ul> <li>Sketchup introduction and basics cont'd</li> <li>Creating objects to scale - furniture</li> </ul> |
| 3- 2/13                               | <ul> <li>Project 1 - sketches and 3d<br/>model</li> </ul>   | PROJECT 1- Furniture/Object - start  |
| 4- 2/15                               | <ul> <li>Project 1 - sketches and 3d<br/>model</li> </ul>   | PROJECT 1- Furniture/Object - DUE  |
| 5- 2/20*holiday<br>2/22               | <ul><li>Using a floorplan</li><li>Creating a 3d Floorplan</li></ul>   | Sketchup tools/methods for floorplans and interiors  |
| 6- 2/27                               | <ul> <li>Materials for interiors</li> <li>Using the Sketchup Ware-<br/>house</li> </ul>   | Sketchup tools/methods for floorplans and interiors cont'd   |
| 7- 3/1                                | <ul> <li>Creating an interior</li> <li>Aesthetics</li> <li>Setting the Camera</li> </ul>  | PROJECT 2- Floorplan/Interior - start  |
| 8- 3/6                                | Project 2 - Floorplan/Interior  | PROJECT 2- Floorplan/Interior - DUE  |
| 9- 3/8                                | <ul> <li>Adding architectural details</li> <li>Adding style/color/little details</li> </ul>   | Embellishing the Floorplan/Interior  |
| 10- 3/13                              | <ul> <li>Setting styles</li> <li>Rendering in Photoshop</li> <li>Rendering in VRAY (if we can get it installed)</li> </ul>  | Rendering the Floorplan/Interior   |
| 11- 3/15                              | Project 3 - Rendered Floor-<br>plan/Interior  | PROJECT 3- Rendered Floorplan/Interior - start   |
| 12- 3/20                              | <ul> <li>Project 3 - Rendered Floor-<br/>plan/Interior</li> </ul>   | PROJECT 3- Rendered Floorplan/Interior - cont  |
| 13- 3/22                              | Project 3 - Rendered Floor-<br>plan/Interior  | PROJECT 3- Rendered Floorplan/Interior - DUE   |
| 14- 3/27                              | <ul> <li>Midterm Project - Refine and<br/>present Projects 1 -3 in a pdf<br/>or video</li> </ul>  | MIDTERM start  |
| 15- 3/29<br>3/31- 5/7*spring<br>break | <ul> <li>Midterm Project - Refine and<br/>present Projects 1 -3 in a pdf<br/>or video</li> </ul>  | MIDTERM DUE  |
| 16- 4/10                              | <ul><li>MAYA introduction</li><li>interface and basics</li></ul>  | MAYA introduction  |
| 17- 4/12                              | MAYA introduction continued   | MAYA introduction continued  |

| CLASS DATE                          | LECTURE + LAB   | PROJECTS  |
|-------------------------------------|---|---|
| 18- 4/17                            | <ul> <li>MAYA manipulating objects<br/>and scenes/ creating poly-<br/>gons</li> </ul> | MAYA manipulating objects and scenes  |
| 19- 4/19                            | Project 4 - Polygonal Model   | Project 4 - Polygonal Model - DUE   |
| 20- 4/24                            | MAYA modeling with Nurbs  | MAYA modeling with Nurbs  |
| 21- 4/26                            | MAYA modeling with Nurbs  | MAYA modeling with Nurbs  |
| 22- 5/1                             | Project 5 - Nurbs Model   | Project 5 - Nurbs Model DUE   |
| 23- 5/3                             | MAYA shading and textures   | Shading and Textures on objects   |
| 24- 5/8                             | <ul> <li>MAYA shading and textures<br/>cont'd</li> </ul>                              | Lighting  |
| 25- 5/10                            | Project 6 - Shaded/Textured     Model   | Project 6 - Shaded/Textured Model - due   |
| 26- 5/15                            | MAYA Rendering  | Rendering techniques and options  |
| 27- 5/17                            | MAYA Animation  | Maya animation basics   |
| 28- 5/22                            | Project 7 - Rendered/Animat-<br>ed Object   | Project 7 - Rendered/Animated Model   |
| 29- 5/24                            | Preparing a portfolio of your<br>work (cont)  | <ul><li>Set up your portfolio</li><li>Review &amp; Refine all semester projects</li></ul> |
| 30- *Finals week<br>6/5 2:30-4:30pm | FINAL PORTFOLIO DUE   | FINAL PORTFOLIO DUE   |
|                                     |   |   |