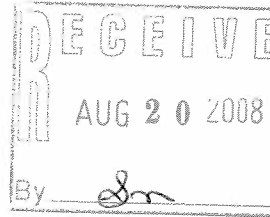


**CIDG 260**

3DS MAX ADVANCED MODELING AND MATERIALS  
COURSE SYLLABUS • FALL 2008  
SECTION NO. 21217 • 3 UNITS



**COMPUTER INTEGRATED DESIGN  
AND GRAPHICS DEPARTMENT  
VICTOR VALLEY COLLEGE**

**CLASS HOURS**

- TUESDAY & THURSDAY
- 7:00 – 7:50 PM LECTURE
- 8:00 – 9:25 PM LAB

**ROOM**

- VE-2

**INSTRUCTOR**

- DOUG CROSS
- TELEPHONE: (760) 245-4271 EXTENSION: 8613

**PREREQUISITE**

- CIDG 160

**TEXTBOOK (S)**

- MODELING A CHARACTER IN 3DS MAX

**FALL CALENDAR**

- INSTRUCTION BEGINS
- LABOR DAY HOLIDAY
- VETERANS' DAY
- THANKSGIVING HOLIDAYS
- FINAL EXAM WEEK

AUGUST 25  
SEPTEMBER 1  
NOVEMBER 10  
NOVEMBER 27-28  
DECEMBER 8-13

**WITHDRAWAL POLICY**

- LAST DATE TO WITHDRAW FROM SEMESTER LENGTH CLASS IS WEEK OF NOVEMBER 4, 2008

**NOTE**

- PLEASE REMEMBER! IT IS THE STUDENT'S RESPONSIBILITY TO DROP. IT IS NOT AN AUTOMATIC PROCESS AND COULD RESULT IN THE STUDENT RECEIVING A COURSE GRADE OF "F" FOR NOT CORRECTLY COMPLETING THE PROCESS.

## 3ds max POLICIES

1. ALL HOMEWORK WILL BE TURNED IN ON THE DUE DATE AND TIME AT THE BEGINNING OF CLASS OR 25 POINTS WILL BE AUTOMATICALLY DEDUCTED FROM ASSIGNMENT.
2. ALL HOMEWORK WILL BE TURNED INTO YOUR NETWORK FOLDERS NAMED ACCORDINGLY:

260

### HOMEWORK 1

HOMEWORK1.MAX

HOMEWORK1.PNG

OR 25 POINTS WILL BE DEDUCTED AUTOMATICALLY.

3. ASSIGNMENTS WILL HAVE A ONE WEEK PERIOD TO COMPLETE, **DO NOT!! PUT THE ASSIGNMENT OFF UNTIL 2 HOURS BEFORE THE START OF CLASS WHEN THE ASSIGNMENT IS DUE, YOU WILL NOT GET HELP. I AM HERE FROM 8:00 AM – 5:00 PM EVERYDAY TO HELP WITH HOMEWORK.**
4. WHEN YOU GET A HOMEWORK ASSIGNMENT PLAN IT SO YOU CAN COMPLETE IT IN THE TIME ALLOWED, DO NOT PUT OFF MODELING A PROJECT AND TELL ME YOU DIDN'T HAVE ENOUGH TIME.
5. YOU WILL NEED ONE CDR OR JUMP DRIVE TO BACK UP ALL YOUR WORK OFF THE NETWORK.

# CIDG 260

## 3ds max Advanced Modeling and Materials GRADING SCALE

Your grade will be based on 6 assignments each worth 50 points, 1 final project worth 100 points for a possible 400 points.

If you receive 325 points out of 400 then your grade would be  $325/400 = .81$  or 81% which is a **B** looking at the grading scale below. Each assignment will have your grade in a grade.txt file in the corresponding homework folder. It is your responsibility to check your grade for the homework assignments completed or missing. Your grades are posted on the network for your benefit so you can keep track as the semester progresses, so when report cards come, there will be no surprise on the grade you earned.

All assignments will be due on the date scheduled. **Late assignments will be accepted up to two weeks after the due date.** Twenty-Five points will be subtracted from the grade for each assignment that is late. No assignment will be accepted after two weeks unless prior arrangements have been made.

**CHEATING:** Any student caught cheating will be removed from class and your account terminated and you will receive an F. Cheating is turning in a copy of someone else's work or giving someone a copy of your work or downloading files from the internet to turn in as your own work. I can look at files whether created at home or school and see the file's origin, which computer it was created on, time it was created, the user name, etc.... Between Steve Nelle, Jeff Stallians and myself we have seen all the work done in classes and more.

Grade	Percentage
A	100-90 %
B	89-80 %
C	79-70 %
D	69-60 %
F	59 % or less

**NOTE:** You have to EARN the right to work on the game level, if you show up all semester and only turn in a couple of assignments; this means you have an **F** for your grade and you didn't care enough to earn the right to make a game level. At this point your account will be terminated and you will not be allowed to continue during the game level editing to finish the semester.

# **CIDG 260**

## **3ds max Advanced Modeling and Materials**

### **Course Description:**

Prerequisite: CIDG 160. Students will learn the more advanced modeling features of 3ds max. Complex aspects of building materials and textures will be covered in depth. The course will culminate with students being introduced to the video game environment, having the opportunity to create their own game level. The course will prepare the students to work in the entertainment, commercial and computer gaming industries.

### **COURSE OBJECTIVES**

At the completion of this course the student will be able to:

1. Create and manipulate complete three-dimensional character models.
2. Accurately create materials, textures and UVW mapping of modeled characters.
3. Understand the process and be able to generate a game level using UnrealEd 3.0.

### **Required Materials**

1. One CD-R/RW or jump drive to back up your work off the network.

### **HOMEWORK**

All models will be turned in on the network on the date and time they are due or 25 points will be deducted. If the assignment is due at 5:00pm, 5:01pm will be considered late.

# CIDG 260 WEEKLY LECTURES

<b>Week 1 t:</b>	<b>Model Low Poly Head</b>
<i>Week 1 th:</i>	<i>Model Callisto Head</i>
<b>Week 2 t:</b>	<b>Model Callisto Eye Area</b>
<i>Week 2 th:</i>	<i>Model Callisto Hair</i>
<b>Week 3 t:</b>	<b>Model Callisto Torso</b>
<i>Week 3 th:</i>	<i>Model Callisto Legs and Gluteus</i>
<b>Week 4 t:</b>	<b>Model Callisto Back</b>
<i>Week 4 th:</i>	<i>Model Callisto Neck and Shoulders</i>
<b>Week 5 t:</b>	<b>Modeling Another Character</b>
<i>Week 5 th:</i>	<i>Model a Beetle Head</i>
<b>Week 6 t:</b>	<b>UVW Mapping a Coke Can</b>
<i>Week 6 th:</i>	<i>UVW Mapping a Jet Fighter</i>
<b>Week 7 t:</b>	<b>UVW Mapping a Tree Frog</b>
<i>Week 7 th:</i>	<i>UVW Mapping Callisto's Head with Texporter</i>
<b>Week 8 t:</b>	<b>Advanced Max Materials</b>
<i>Week 8 th:</i>	<i>Advanced Max Materials</i>
<b>Week 9 t:</b>	<b>Photoshop Textures an Introduction</b>
<i>Week 9 th:</i>	<i>3D Texture Art (Eni Oken)</i>
<b>Week 10 t:</b>	<b>Create Game Textures in Photoshop</b>
<i>Week 10 th:</i>	<i>Create Game Textures in Photoshop</i>
<b>Week 11 t:</b>	<b>Paint Textures on Unwrapped UT Weapon</b>
<i>Week 11 th:</i>	<i>Photoshop Face Maps</i>
<b>Week 12 t:</b>	<b>Intro to the UnrealEd 3.0 Level Editor</b>
<i>Week 12 th:</i>	<i>Level Creation</i>
<b>Week 13 t:</b>	<b>Level Creation</b>
<i>Week 13 th:</i>	<i>Level Creation</i>
<b>Week 14 t:</b>	<b>Level Creation</b>
<i>Week 14 th:</i>	<i>Level Creation</i>
<b>Week 15 t:</b>	<b>Level Creation</b>
<i>Week 15 th:</i>	<i>Level Creation</i>
<b>Week 16 t:</b>	<b>Final Project Due</b>
<i>Week 16 th:</i>	<i>Final Project Due</i>

# CIDG 260

## 3ds max Advanced Modeling and Materials

### COURSE OUTLINE

#### I. Design

##### A. Design Fundamentals

1. Limitations
2. Make it Cool
3. Drawing Skills
4. Proportions
5. Reference Material
6. Influences
7. Work Environment

#### II. Modeling

##### A. The Guide Objects

1. Bring the Image in Max
2. Create the Guideline Objects
3. Attach the Lines
4. Create the Rest of the Guidelines
5. Scale the Guideline

##### B. The Head and the Face

1. Create a Geosphere
2. Scale the Geosphere to Fit the Guide
3. Delete Half the Geosphere
4. Tweak the Shape of the Geosphere
5. Add Vertices By Dividing Edges

##### C. The Hair

1. Extrude Faces From the Head
2. Move the Vertices to Match the Guide
3. Add Vertices Using Edge Cut
4. Weld Excess Vertices

#### D. The Torso

1. Create the Spline Cage Object
2. Apply Surface Tools
3. Move and Adjust the Vertices of the Spline
4. Delete any Unnecessary Geometry
5. Create the Breast Shape

#### E. The Legs

1. Make a Cylinder
2. Shape the Cylinder to Match the Guide
3. Boolean the leg to the Torso
4. Clean up the Legs on the Boolean Seam
5. Shape the Hip Area

#### F. The Back, Neck and Shoulders

1. Shape the Back
2. Create the Neck Mass Using Face Extrude
3. Refine and Optimize the Neck Mass
4. Prepare the Torso for the Shoulder
5. Extrude the Shape of the Shoulder

#### G. The Arms

1. Merge an Arm from Another Max File
2. Shape and Attach the Arm
3. Mirror-Copy the Arm to the Other Side
4. Add Detail to the Left Arm
5. Loft Tubing for the Left Arm

#### H. Modeling a Cartoon Character ( The Beetle)

1. Create Head From Two Boolean Objects
2. Create Body from a Box
3. Optimize Body Parts before Welding Together
4. Final Shaping and Add Mesh Smooth

### III. UVW Mapping and Texturing

#### A. Introduction to the UVW Map

1. Map a Coke Can With Multiple Maps and UVW Maps
2. UVW Map a Jet Fighter Using Unwrap UVW
3. UVW Map a Tree Frog
4. Use Photoshop to Correct Adjacent Textures on Tree Frog

#### B. Mapping Callisto's Head

1. Apply an Edit Mesh Modifier
2. Arrange the Elements
3. Adjust the Vertices for the Planar Projection
4. Apply a UVW Map Modifier

#### C. Texture Art by Eni Oken

1. Color Background Image in Photoshop
2. Setup Background Image in 3ds max
3. Extrude and Loft Objects to Match Background
4. Texture and Add Lights
5. Render Image and Open in Photoshop
6. Make Texture Ready for Tiling in Photoshop

#### D. Textures for Games using Photoshop

1. Go More In Depth with Photoshop
2. Using Filters
3. Create Metal Plates and Screws
4. Create Marble Tile and Stone Textures
5. Paint Texture on Unwrapped UT weapon

### IV. Introduction to UnrealEd 3.0

#### A. UnrealEd Environment

1. Actors
2. Static Meshes
3. Builder Brush
4. Textures
5. Build and Enter Game

## B. Architectonic Tutorials

1. Build Your First Room
2. Add Halls and Textures
3. Lighting
4. Walkways, Stairs and Railing with Static Meshes
5. Spiral Staircase and Upper Catwalk in Main Arena
6. Bot Pathing, Weapon Placement and Jump Pads

## C. 3d Buzz 3 Tiered Arena

1. Arena Creation with Builder Brush
2. Boolean Cutouts and Grouping
3. Static Meshes
4. Movers and Lifts
5. Water
6. Lighting
7. Glass, Volume Brushes and Textures
8. Create Screen Shot
9. Info for Game Menu

# MAX LAB LOGIN PROCEDURE

**USERNAME:**     **lastname.max**

**PASSWORD:**    **last 4 digits of your student I. D. number**

**AT THE NEXT DIALOG BOX THAT POPS UP JUST HIT THE ENTER KEY ON YOUR KEYBOARD THERE IS NO PASSWORD.**

**WHEN LOGGING OUT.....**

**GO TO THE BOTTOM LEFT CORNER OF YOUR SCREEN AND GO TO START, SHUT DOWN, LOG OFF AS MAXSTU AND CLICK OK**

# STUDENT REGISTRATION INFORMATION

Please print your class roster on WebAdvisor. If a student's name does not appear on your roster, that means he/she has **NOT** enrolled in your class. Please print rosters each day for the first week of class, as students may add a full term class during that time. Please let students know they cannot remain in the class unless they are registered.

## THIS IS AN INSURANCE REQUIREMENT.

At the beginning of the second week of the semester for full term classes or on the first day of short term classes, you must sign the student's ADD form to allow enrollment in your class. To give permission for a student to add an online class, please send an email that states the section number and name of the class and that you will allow the student to enroll.

### **NOTE:**

This also applies to visitors in computer labs, if a person is not registered in the class they will have to leave because they are not covered by insurance as stated above.