

URBP 148/248 Advanced Computers in Urban Design

Spring 2012

Tuesdays 7:15 pm -10:00 pm WSQ 208 3 units

Instructor: David Vasquez

prerequisite: general familiarity with Windows or Mac operating system

Course Description

This is a hands-on, beginner to intermediate level computer-graphics course for pre-visualization and concept-development of urban design and architectural projects. It will focus on three industry-standard applications: a paint program; a draw program; and a 3-D program. It will explore how the three can be used in combination to create accurate and emotionally-engaging depictions of projects that don't yet exist. The primary course activity will be a series of assignments that cover each of 3 applications. A fourth assignment will focus on combining applications to create composite images.

A secondary course objective will be to explore key themes in contemporary urban/architectural design with special attention to ecological sustainability and how computer graphics can advance this cause

Primary software applications covered will be:

Illustrator CS 2-d drawing and Illustration

SketchUp 6 or 73-D modeling, real time rendering, camera animation

Photoshop CSdigital image processing

Secondary applications

GoogleEarthweb-based aerial photography

possible additional 3-D rendering software to be announced

Specific learning objectives

- theory and strategies for creating accurate and emotionally-engaging photo-simulations
- basic/intermediate level Adobe Photoshop skills for architectural rendering, urban design illustration
- basic/intermediate level Adobe Illustrator skills for map-making and urban design illustration
- basic to advanced level Google Sketchup skills for architectural and urban design illustration
- techniques for digital photography, and use of, for photo-simulation
- techniques for integrating Sketchup models with Photoshop scenes

Course Requirements

The first and most important requirement is your attendance to class, since much of the information will be difficult to make up without supervised hands-on experience

Each student should have one or more USB memory devices for file storage and transfer. With Murphy's Law in full force it is the student's responsibility to back up all important files.

Grading and Evaluation

primary assignments (4 total) letter grade..... 40%

midterm and final testletter grade 30%

exercisescredit/no credit 15%

participationletter grade 15%

Late assignments will normally NOT be accepted. However, under exceptional circumstances, extensions may be considered if the if the instructor is notified BEFORE the assignment's due date.

Class format and Office Hours

The class meets from 7:15 to 10:pm and will follow a laboratory format. For most class sessions, about half the allotted time will be lecture/demonstration while the other half is supervised practice and work sessions. Office hours for David Vasquez will be Tuesdays 5:00 to 6:00 pm in the Urban Planning room 218A or by appointment (DVasquez@aol.com).

Schedule

Jan 31 orientation;

Feb 7 intro to Photoshop

Feb 14Photoshop

Feb 21 Photoshop (*short movie review or book review essay due*)

Feb 28 Photoshop (digital picture for Photoshop assignment due for review)

March 6 Photoshop (Photoshop quiz; preliminary rendering due for review)

March 13intro to SketchUp **Photoshpe assignment due**

March 20 ... SketchUp hand back quizzes

March 27 ... **Spring Break** **Spring Break**.....

April 3 SketchUp

April 10 SketchUp **mid-term**;

April 17 Illustrator **SketchUp assignment due**

April 24 Illustrator

May 1 Illustrator

May 8combining applications **Illustrator assignment due**

May 15 compositing Photoshop and SketchUp (last day of instruction)

May 22 **Final exam** **compositing assignment due**