URBP 148/248    Advanced Computers in Urban Design
Spring 2011
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 7 ......3-D modeling, real time rendering, camera animation
Photoshop CS .....digital image processing

Secondary applications
GoogleEarth ............web-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 test ..................letter grade .............................................. 30%
exercises ...........................................credit/no credit .................................. 15%
participation ..................................letter 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

Feb 1 ..... orientation;

Feb 8 ..... intro to Photoshop

Feb 15 .......Photoshop

Feb 22 ...... Photoshop (short movie review or book review essay due)

March 1 ...... Photoshop (digital picture for Photoshop assignment due for review)

March 8 .... Photoshop (Photoshop quiz; preliminary rendering due for review)

March 15 ....intro to SketchUp .......... Photoshop assignment due

March 22 ... SketchUp hand back quizzes

March 29 ... Spring Break .................................. Spring Break......................................................

April 5 SketchUp

April 12 ..... SketchUp mid-term; ........

April 19 .... Illustrator SketchUp assignment due

April 26 .... Illustrator

May 3 .... Illustrator

May 10 .... combining applications .......... Illustrator assignment due

May 17 ....compositing Photoshop and SketchUp (last day of instruction

May 24 .... Final exam ..... compositing assignment due