URBP 148/248  Advanced Computers in Urban Design

Spring 2008
Thursdays 7:15 pm -10:00 pm  WSQ 208  3 units
Instructors 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 application. 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 5.0 ......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 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 alloted time will be lecture/demonstration while the other half is supervised practice and work sessions. Office hours for David Vasquez will be Tuesdays 1:00 to 3:00 pm in the Urban Planning room 218A or by appointment (DVasquez@aol.com).

Schedule

Jan 24 ..... orientation;

Jan 31 ..... intro to Photoshop

Feb 7 .......... Photoshop

Feb 14 ...... Photoshop

Feb 21 ...... Photoshop

Feb 28 .... Photoshop

March 6 .... intro to SketchUp .........Photoshop assignment due

March 13 ... SketchUp

March 20 ... SketchUp

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

April 3 ..... intro to Illustrator mid-term; ........ SketchUp assignment due

April 10 .... Illustrator

April 17 .... Illustrator

April 24 .... Illustrator

May 1 .... combining applications ........ Illustrator assignment due

May 8 .... compositing Photoshop and SketchUp

May 15 .... compositing Photoshop and SketchUp

May 22 Final exam ..... compositing assignment due