Course Information

Number and title: Arch 438 - Design Visualization

Professor info: Alphonso Peluso, ALA
E-Mail: peluso@iit.edu

Prerequisite(s): Arch 427 or Arch 508 or permission from the department

Required Text and Materials: All tutorials for in class learning will be provided on the portal

Tutorials and Class Assignments Location: http://DigIITalArchFab.com/portal/arch-438/

Course description: This course is an in-depth exploration of new visualization techniques to support and express architectural design through 3D rendering. Topics covered will include: 3D modeling, cameras, lighting, material mapping, & rendering output. Presentation concepts covered include: storytelling, rendering style, visual mood & image composition

Course goals and objectives: Students will build a 3-D model and produce several renderings of a past studio project for midterm.

For the final students will produce several renderings of their current studio project for a presentation layout.

Software: Autodesk Revit Architecture
Autodesk 3ds Max Design
Adobe Photoshop

For free autodesk software downloads visit http://students.autodesk.com

Web links:
http://facebook.com/DigIITalArchFab
http://twitter.com/DigIITalArchFab
http://turbosquid.com
http://kit3dmodels.com
http://e-interiors.net
http://hermanmiller.com
http://accustudio.com
http://cgarchitect.com
http://got3d.com
http://doschdesign.com
http://lowpolygon3d.com
http://erco.com

Grading: Each class students will submit completed class assignment(s) showing their progress and understanding of basic concepts. Final grade is based on four percentages:

- 10% for attendance
- 10% for homework assignments
- 20% for the midterm
- 60% for the final

Midterm and Final Grades are determined by judging 5 different categories:
Modeling
Cameras
Lighting
Materials
Presentation Layout

IIT College of Architecture Digital Design & Fabrication Curriculum (DigIITalArchFab)

Mission: The mission of the IIT College of Architecture Digital Design & Fabrication curriculum is to be ahead of the technology advancements and shifts in Architectural Digital Design. Our curriculum will give our students the core foundation, principles and skills that will allow them to develop and implement the next emerging Architectural Design technologies.

Students with Disabilities Statement:

Americans with Disabilities Act (ADA) Policy Statement
Reasonable accommodations will be made for students with documented disabilities. In order to receive accommodations, students must go through the Center for Disability Resources Office. The Center for Disability Resources (CDR) is located in Life Sciences Room 218, telephone: 312.567.5744 or disabilities@iit.edu.
Class Schedule

Class One: Sneak Preview 1
AutoCad / Revit Strategy _ Revit Basics _ Max Basics

Class Two: Sneak Preview 2
Revit Basics _ Revit/Max Strategy _ Max Daylight System

Class Three: Sneak Preview 3
Revit Basics _ Materials _ Daylight Settings

Class Four: Modeling 1
Create Group _ Mirror _ Hide _ Unhide _
Exposure Value _ Generic Modeling #1

Class Five: Modeling 2
Storefront Curtain Wall _ Interior Walls _ Doors _
Generic Modeling #2

Class Six: Modeling 3
Stairs _ Terrain _ Site _ Generic Modeling #3

Class Seven: Lighting Techniques 1
Free Light _ Mental Ray Shadow Map _ Shift Clone _
Array _ Instance _ Render Setup

Class Eight: Midterm Presentation
Tuesday Oct. 9th

Class Nine: Materials 1
Environment _ Grass _ Concrete _ Masonry

Class Ten: Materials 2
Metal _ White Paint _ Self Illumination _ Water _
Wood Floor _ Wood Wall

Class Eleven: Materials 3
Bump Map _ Self Illumination _ Cutout _
Displacement Map _ UVW Gizmo _ Tiles Map

Class Twelve: Lighting Techniques 2
Target Light _ Line Light _ Rectangle Light

Class Thirteen: Rendering Output / Photoshop Techniques
Merge Objects _ Blowup _ Resolution _ Reflection _
Shadow _ Brightness / Contrast

Class Fourteen: Output
Ambient Oclusion _ Photomontage _ Google Earth

Class Fifteen: Work In Class

Finals Week: FINAL PRESENTATION
Date & Time to be determined

*note: course syllabus & schedule are subject to change