



INTERIOR 1061 CAMELBACK RD P. 949.675.4451
DESIGNERS NEWPORT BEACH F. 949.759.0667
INSTITUTE CA 92660 www.idi.edu

Course 443 3D CAD

Software Sketch Up & Enscape

Students must purchase copies of the software listed here in order to complete required coursework.

Students are required to match the software versions currently installed in the IDI computer labs. If you are unsure, ask before you purchase and install.

Technoliteracy

Students are solely responsible for all computer related items including but not limited to; hardware, software, files, and file backups. The student is solely responsible for any issues, crashes, glitches, non-performance, and grade point loss related thereto. Each student is required to backup their own files.

Grading Project process deliverables (5 at 20 points each): 100 points

Attendance Each student may have two total absences. However, more than two consecutive class meeting absences or three non-consecutive class meeting absences per course may result in the student being withdrawn from the course. Attendance is considered an important habit to acquire in becoming a mature, responsible member of the professional community.

Project

- 1-Fully furnished
- 2-Fully accessorized (media, pillows, art, sculpture, foliage)
- 3-Exhibiting appropriate materials & lighting
- 4-In the format listed above

Project Progress Files

01 Enclosure

02 Furniture & Accessories

03 Materials

04 Illumination

05 Final Rendering

1

5-5 Modeling 1

Lecture

Technologically-based collaboration method, benefits of SketchUp, 3D models and renderings

Orbit (scroll button - use as a button)

Pan (scroll button - shift + click)

Zoom (scroll)

Zoom Window (shift + ctrl + w)

Zoom Extents (shift + z)

Rectangle (r)

Axes; red, green, blue

Inference engine: hover; Endpoint, Midpoint, Intersection, on face, on edge

VCB (Value Control Box)

Push Pull (p)

Select; left/right, number of clicks

Deselect (ctrl + t)

Faces

Edges

Delete (Not erase)

Undo (ctrl + z)

Move / Copy (m / m + ctrl)

Scenes; Window > Scenes

Component; Window > Component, Warehouse

Group creation (select, then right click)

Line (l)

How to delete all materials

Style for speed; Create New Style, edges only, no transparency, turn off background, no watermarks, turn off section planes and hidden geometry

Settings for speed; turn off scene transitions; view > animations > settings

Navigation tips; Camera>Look Around, Orbit, Shift to Pan, Walk, Position Camera with plan view, Standard Views; Camera > Standard Views, Utilize Scenes for navigation

Shadows

2

5-12 Modeling 2

Lecture

Tags (Layers)

Styles; Window > Styles

Camera > Field of View

Printing
Export 2D Graphic
Export Options
Circle (c)
Enter # of sides before clicking to start circle
Measure (t)
Offset (f)
Line (l)
Arc (a)
Follow me; Tools > Follow me
Rotate (q)
Standard Views; Camera > Standard Views
Component creation
Component modification
Right click context menu, component implications, change color example, Use
Details to create a collection
How to delete all materials (reminder)

5-19 **3** Lab

Work to complete model enclosure

01 Model enclosure is due before next class

5-26 **4** Lab (Holiday 5-30)

Work to complete model furniture & accessories

02 Model furniture & accessories is due before next class

6-2 **5** Materials

Lecture

Emissive materials
“emissive” in material name
Enscape materials options
Custom materials
Create in SketchUP
textures
3d warehouse
model info, materials, download
modifier word for reflectance (ceramic example)

add this first
bump maps
use albedo
texture position
right click on face, texture, position
carpet
Height
enscape carpet for fluffy texture
Change Type from default to carpet
add generic image format
materials, create material, texture, browse

Add modifier word to material name:

The following words added to a material name in the SketchUP materials palette will result in a realistic texture, surface, and reflection in the Enscape rendering:

water, ocean, river
vegetation, foliage, leaf
emissive (glow or light emitting)
grass, tall grass, short grass, wild
long carpet, short carpet
glass, glazing
chrome, mirror
steel, copper, metal, aluminium (yes, with an "i")
carpaint, polished, acryl
ceramic
marble
plastic
fabric, cloth

6-9 **6** Lab

Work to complete model materials

6-16 **7** Lab

Work to complete model materials

03 Model materials are due before next class

6-23 **8** Illumination

Lecture

Note: Insert lights inside components

Temporary construction lines

Start Enscape

Enscape Objects

Spot, Sphere, Line, Rect, Disk

Construction lines

Ceiling to floor vertical line

Light placement

*1st click at line top, 2nd click just below, 3rd click at floor with
vertical line to floor (or blue reference line) 4th for tilt or confirm*

vertical

Intensity

Emissive

For everything else

Rendering settings

Visual settings

Output tab- Resolution, Custom, 1920x1080, safe frame

Sky tab- Source options

Take a screenshot button, save as type .jpg

Enscape asset library

6-30 **9** Lab (Holiday 11-22)

04 Model illumination is due before next class

7-7 **10** Lab

Work to complete model for final rendering

7-14 **11** Lab

Work to complete model for final rendering

05 Final Rendering is due before next class

7-21 **12** Grading - No class meeting