

HW1 (13 points)

1. Draw your lab desk in Sketchup.
 - a. Exact measurements not necessary.
 - b. Square edges OK.
 - c. Do not draw the equipment.
 - d. Apply three colors or textures to better view your model.
2. Save the completed work in a Sketchup file named:
IABC2007_HW1 _____ .skp (use your name in the blank).
3. Print a good view of you lab desk showing the materials.

HW2 (13 points)

1. Draw a table lamp in Sketchup.
 - a. Exact measurements are necessary.
 - b. Square edges OK.
 - c. Do not draw bulb and misc items.
 - d. Apply three colors or textures to better view your lamp, the shade should be partially transparent.
 - e. The lamp should be:
 - i. 24" tall overall.
 - ii. Have a 14" diameter shade, a straight cylinder.
 - iii. The base should be 5" square column, with an overall height of 12".
 - iv. The base should have (one) 1" high by ½" squared larger lip on the top.
 - v. The base should have a double lip on the bottom, 1" high each and ½" larger each.
 - vi. Make 4 wire lines across the top of the shade to simulate the suspension hangers on the top. Make two sire lines from the sides on the top of the base to connect to the wires on the shade.
2. Save the completed work in a Sketchup file named:
IABC2007_HW# _____ .skp (use your name in the blank).
3. Print a good view of your lamp showing the base.

HW3 (13 total points total)

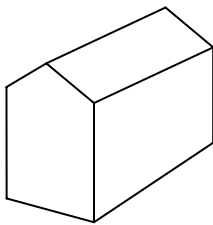
1. Demonstrate concepts of Styles and Scenes and text. (10 points)
 - a. Use a copy of your lab desk for this exercise.
 - b. Make 5 scenes for printing, each using a different style: 4 should be from the defaults, and one should be a different style that is not one of the defaults.
 - c. Add text to your views so that your printed sheet shows your name and 'HW#6'.
 - d. Save the completed work in a Sketchup file named:
IABC2007HW#_____.skp (use your name in the blank.)
2. Demonstrate proficiency inserting components (3 points).
 - a. Insert three components from the default libraries in SU6 (use something useful in Interior Design.) One should be a door or window into a vertical surface, one should be a piece of furniture or cabinetry on a ground plane. The third one is your choice.
3. Extra credit (2 points): take one of the components in part 2a above and make changes and save as a new component name before printing and email your file (i.e. show 4 items in your printed homework).

HW4 (18 points) demonstrate Follow Me

1. Demonstrate proficiency importing a CADD file. (01-206-16.dwg from http://www.worthingtonmillwork.com/cad_moldings.html).
2. Edit the millwork (crown molding) into a face within the component. Delete the extraneous material from the component.
3. Demonstrate proficiency with rotation tool. Make a room 10' x 25' x 10' high. Rotate your crown molding to a corner (or a midpoint) and orient correctly to pull it thru one edge of the ceiling.
4. Demonstrate proficiency with Follow Me tool. Run your crown molding around the top of the room. Don't forget to explode your correctly placed component before starting the follow me.
4. Save the completed work in a Sketchup file named:
IABC2007_HW#_____.skp (use your name in the blank).
5. Print a good view of your work.
6. Extra credit (2 points): import and run a chair rail around the room at 3' above finished floor. Print a good view of your work.

HW5 (18 total points) draw the exterior of a building

1. (7 points) demonstrate drawing to scale
 2. (5 points) demonstrate editing components by size and/or color.
 3. (4 points) demonstrate editing an existing material by scale and/or color.
 4. (2 points) demonstrate layering (minimum 4 layers and sort your model items.)
- Draw and design the outside of a model as a simple box with a gable roof. Inside does not have to be drawn. We have had interior designers choose the colors of our materials, paint, door frames, exterior paving, etc., so practise your exterior design.
 - Bldg is 30' x 40' x 10 feet high walls. The bldg is to be brick and stucco. Stucco joints are usually at windows and doors, and max 100 sf of stucco.



Add a gable roof. Gable roof is such that the gables are on the shorter side. The roof pitch is 4-in-12 (4 inches up to 12 inches across). You do not have to give the roof thickness or overhangs. Add painted siding to the gable ends.

The gable is at the midpoint, so the extra height in the middle is 4" times 15 (feet) == 60 inches extra

(my example is not true to scale, just a diagram)

1. Put the building on a 6" high concrete pad (grey concrete).
2. Place 2 doors and 4 windows around the model (use logical, but not dimensioned placement, ie don't put the door exactly on the corner without a piece of wall showing). Edit your doors and windows for texture/colors on the frames, doors and glass per your choice. Use a minimum of two different components.
3. Add 5'x5' concrete stoops outside each door to step onto. Use a colored concrete for the stoop material by editing the concrete used for the floor slab. (dark green and clay-red are common colors that we see used, they hide dirt and oil better.)
4. Save homework .skp file per naming conventions.
5. Turn in a printed view showing an overall view of at least two sides, including a door. Have your name and 'HW#', 'IABC Spring 2007' showing in the printed view. Save this to a scene. Your text should not be over your model.

Extra credit: make 4 scenes showing the 4 different corners in sequence around your building. Turn in with your .skp file above. Print your views and add 'extra credit' to the prints for the extra views only. (try using layers for this.)

HW6 (8 total points)

- A. (4 points) demonstrate creating section cuts
- B. (4 points) demonstrate displaying section cuts and planes

Use your building homework file to show your sections cuts:

1. Make two sections cuts, one horizontal and one vertical
2. Print the 4 types of displays that are the combinations of the possible displays (please rotate your perspective view to show off your section cuts)
 - o Display planes only
 - o Display cuts only
 - o Display cuts and planes
 - o Display no cuts or planes
3. Save homework .skp file per naming conventions.
4. Turn in 4 printed views showing the four different types of display. Have your name and 'HW9', 'IND2318 Spring 2007' showing in the printed view. Your text should not be over your model.

Extra credit: make 2 scenes showing a section plane at an angle to your model. (you should use rotate to turn your section plane to an obvious angle. (2 points)

HW7 (13 total points)

Hint: Use your building homework or something similar as your model.

5. (5 points) demonstrate inserting your model into Layout (minimum 2 views on two sheets).
6. (4 points) demonstrate using a Layout template with a titleblock (8 ½ x 11), edit the text for IND 2318, Spring 2007, HW10, and your name. Add a logo if you like.
7. (4 points) demonstrate adding text and notes in Layout (minimum 2 different types of text, ie size or font.) Use page numbers (or letters).

Turn in printed sheets, your Sketchup file and your Layout file. Use class naming conventions (must have your name in the filename!)

Extra credit: make a layout sheet showing a section plane of your model. (you should use rotate to turn your section plane to an obvious angle. (2 points)

Final Project (50 total points)

Design an interior room, floor, all walls, ceiling, furnishings, door and/or window openings.

Use the Satellite Dining Room handed out in class, or another similar room. Produce 8 ½ x 11 brochure (color) to turn in documenting your design and giving yourself the byline!

Turn in all electronic files necessary to reproduce a paper copy of your brochure (i.e. save your scenes correctly). Mastery indicates your choices make your design readable, intentional, and it all goes together.

In Sketchup:

8. Demonstrate competency drawing to scale, 4 points. (Mastery - 5 points) * see note below
9. Demonstrate competency using scenes to present perspective (and parallel projection) views, 4 points. Electronic file should match your printed sheets. (Mastery – 5 points)
10. Demonstrate competency in use of components, 4 points. Materials should be applied to all opaque surfaces. (Mastery – 5 points)
11. Demonstrate competency in use of styles, 4 points. Minimum 2 styles. Suggest a plan view in linework only, and perspective views in 'rendered' materials. (Mastery – 5 points)
12. Demonstrate competency using section cuts to present your design, 4 points. (Mastery – 5 points)
13. Demonstrate competency with text placement, 4 points. Label all sheets with name, IABC2007, and your name. (Mastery – 5 points)
14. Demonstrate competency using layering, 4 points. Layering may be necessary for scenes to print correctly. (Mastery – 5 points).
15. Demonstrate competency with materials and finishes, 4 points. All surfaces should have an applied material. (Mastery – 5 points)
16. Demonstrate competency with Follow Me Tool, 4 points. Provide a minimum of 2. Suggestions: crown molding, wood base, chair rail, or handrail. (Mastery – 5 points)
17. Demonstrate competency with dimensions, 4 points. (Mastery – 5 points)
18. IN LAYOUT, demonstrate basic competency with Layout by showing a minimum of 2 views of your model on each sheet, 4 points. Insert text to match your other brochure pages. (Mastery – 5 points)

The total mastery points listed in 1-11 above is 55 points, so you can choose to not demonstrate one of 9, 10, or 11. Numbers 1 thru 8 are required to make a brochure.

Color printing required. (use of the large plotter and trimming is permitted).
Sheet numbers or letters required.

Don't forget to apply materials to all your furniture!

Turn in printed sheets, your Sketchup file (one) and your Layout file (one). Use class naming conventions (must have your name in the filename!)

Extra credit:

- a. SU scenes transition in a logical order, (2 points).
- b. Make your entire presentation in Layout (5 points).

* If using a design other than the Satellite Dining handed out in class, attach scaled sheets showing dimensions of the concept to sufficiently identify the scales. Hand sketches accepted. Dimensioned Sketchup sheets are also accepted to demonstrate drawing to a reasonable scale (random fractions in dimensions do not demonstrate drawing at an intended measure).