Sketched floor plan
Objectives

- Draw a floor plan
  - Using 3 different line weights
- Cut plane and cut elements
- Scale and details
- Exercises
  - Furniture in plan
  - Floor plan with furniture and floor design
- Homework #1 – need to turn in
- Break lines - when to use
- Learn how to draw stair cases in plan
Floor plan

- Is a virtual slice thru an entire building
  - Horizontally, 4’ above the floor surface
- This slice is called cut plane
- Two-dimensional drawing
  - Visually communicate the spatial conditions in a building
  - Study about the relationship between adjacent spaces
- Objects that are sliced
  - are called cut elements
  - are drawn with very dark lines
  - These objects also rendered with solid tone, also called “poche”
  - Show the relationship between mass and void
Line Weight

- Heavy line
  - All cut elements - walls, windows, columns, doors, built-ins
- Intermediate
  - Furniture, appliances
- Light
  - Floor surface, patterns, door swing, transition line
- Dashed (Intermediate line)
  - Long dashed line – major architectural/non-architectural elements, objects that are above the cut plane
  - Short dashed line - major architectural/non-architectural elements, objects that are below countertop
Design process

- Conceptual design thru hand-drawn plan
  - Is the process of exploring multiple design repetitions and critically evaluating each as an appropriate solution to a design problem
  - Is also called preliminary floor plan
    - Hand drawn
Scale and details

- As the scale increases, you are required to include additional information/details for the doors and windows in your drawing.
- Floor plans drawn at 1/16” are too small to draw doorjamb.
- 1/4” are large enough to show details like doorjambs and windowsills.
Exercise 1 - Furniture in plan

- Top view
- Select a scale
- Identify boundaries and geometry
  - Use medium lines to identify the perimeter around the furniture or object
- Use dashed lines to identify major elements that are hidden below the top surface of this piece of furniture
  - Pedestal, shelves, leg
- Important to show detail like handle and etc.
- Some examples: Use dashed lines
  - Dishwasher, under the countertop, seats stuck under the table, shelving
Exercise 2 – floor plan

- Trace it without straight edge
- Floor plan
  - Scale: 1/8" = 1'-0"
- Use dark line to trace over all the cut elements
- Use medium line to trace over window sills, furniture
- Use light line to trace over floor materials in each of the rooms
- Use poche or hatching to fill the walls in this drawing
Show floor materials

Wood
- Plank and Strip
- Strip - are narrower 3"
- Plank - are 3" or greater

Tiles
- 6”x 6”, 12”x12”, 18”x18”

Carpet or rug
- Broadloom 12’w
- Carpet tiles
  - 12”x12”
  - 18”x18”
  - 20”x20”
  - 36”x36”
Homework 1

- Do not draw the cabinets or closet this way
- Draw them without the crossed lines
- Show line weights and line type
  - Not all info provided are correct
- Poche the walls
- Heavy for texts and arrow head
- Medium for leader
Homework 2 – show table material

- Do not draw the cabinets or closet this way
- Draw them without the crossed lines
- Show line weights
Exercise 3 – sketch out floor plan

- Break line to indicate where a portion of a drawing has been cut off and removed
  - A broken line consist of long segments joined by short zigzag or “s” strokes

- Floor plan 1/8”
  - Doesn’t show door thickness
  - Trace it without straight edge
Stairs in plan

- Use light lines for steps in floor plan
- Stairs that go down to the first floor are visible unless they pass under the floor opening
- Stairs that go up to the second floor are sliced at the cut plane (at what height?), stairs are identified with dashed lines
- Add arrow and label indicating the direction of travel from the current plan

UP or DN
Exercise 4 - stairs

- Sketch out each flight of stairs in plan from level one thru three
- Show details – steps, landings, handrails, direction of travel from the current plan, and break line
- Show line weights

- Identify if the stair is moving up or down from the current level by writing the letters “UP” or “DN”
Exercise 4 - stairs

- Look at the cut plane on all levels.
- Identify if the stair is moving up or down from the current level by writing the letters “UP” or “DN”.

Cut plane

Level three
20'-0"

Cut plane

Level two
10'-0"

Cut plane

Level one
0'-0"

Stair elevation
Scale: ¼" = 1'-0"

Stair plan: level three
Scale: ¼" = 1'-0"

Stair plan: level two
Scale: ¼" = 1'-0"

Stair plan: level one
Scale: ¼" = 1'-0"
Exercise 4 – level one

- Look at the cut plane and image you’re standing on 1st level landing looking down

- Show details – steps, landings, handrails, direction of travel from the current plan, and break line

- Show line weights

- Identify if the stair is moving up or down from the current level by writing the letters “UP” or “DN”
Exercise 4 – level two

- Look at the cut plane and image you’re standing on 2nd level landing looking down
- Show details – steps, landings, handrails, direction of travel from the current plan, and break line
- Show line weights
- Identify if the stair is moving up or down from the current level by writing the letters “UP” or “DN”
Exercise 4 - stairs

- Look at the cut plane and image you’re standing on 3rd level landing looking down

- Identify if the stair is moving up or down from the current level by writing the letters “UP” or “DN”
Exercise 5 - stairs

- Sketch out each flight of stairs in plan from level one thru three
- Show details – steps, landings, handrails, direction of travel from the current plan, and break line
- Show line weights

Identify if the stair is moving up or down form the current level by writing the letters “UP” or “DN”