

## Community Notes: Wk 2

### **RULES for community notes:**

Highlight yellow for rhino command

Highlight green for grasshopper command

Highlight in blue for emotional encouragement

*While you cannot delete anyone else's notes,  
you can edit them: re-organize, clarify, etc!*

### **Important Settings / Tools:**

- **Enable “gumball”**
- **Enable OSnaps**
- **(disable all of the other options on that bottom toolbar (i.e. smartTrack))**

### **Vocabulary:**

- Radius – (dist from center of circle to edge)
- Diameter – 2 X Radius
- Coincident – 2 or more geometries at the SAME POINT in space
- Coliner – 2 or more geometries that exist in the SAME LINE in space
- Coplanar – 2 or more geometries that exist in the SAME PLANE in space
- Curve (crv) – line, multiple lines connected together (polyline)
  - Open curve – curve whose end points ARE NOT coincident
  - Closed curve – curve whose end points ARE coincident
- Osnap – object snap
  - Snaps new objects to existing ones
    - Helps with precision modeling
  - End – snaps a new shape to the ends of curves
  - Mid – snaps a new shape to the mid point of a curve
- Interpolate – guessing between known data points
- Extrapolate – guessing the data beyond what is known
- CamelCase-

### **Commands:**

- **Polygon** – draws polygons
  - NumSides (N)
    - Changes the number of sides of your polygon

#### - ExtrudeCrv

- Pulls a 2d shape into 3D (curve extends to a plane)
  - A very empty plane :( like my soul
- Solid = yes
- - Turning on solid creates a solid object automatically (not just a plane)
- DeleteInput = Y/N
  - Deletes the original curve the 3D shape is pulled from

#### - Cap

- Creates any missing planes

#### - Move

- Moving an object from point A to point B
  - By using Osnap, objects can be moved to different points of curves
  - Lines can be used as reference points for moving

#### - Copy

- Very similar to Move

#### - Rotate

- rotates an object around point C, from angle A to angle B
  - Copy = Y/N
    - Copies items along the path of the rotation

#### - Revolve

- Creates a surface (srf) of revolution from a crv
  - Select the curve that will revolve, then select the axis it will revolve from
  - Typing 360 will instantly revolve the entire object around

#### - Loft

- Interpolates a surface between two or more curves

#### - Boolean Union

#### - Boolean Difference

### Navigation / Keyboard Shortcuts

- You can type the underlined letter of a command to execute it instead of clicking it
- ENTER / SPACE / RMB will re-activate the last used command

### Q&A:

**Question:** ICONS vs commands?

**Answer:** commands are more efficient for the most part, but it depends on the situation

(for example: it might be faster to click a focal point toolbar button than type in the command, but many commands aren't on that toolbar or might have confusing or misleading icons)