Temple University: Tyler School of Art: Department of Architecture
ARCH 1012: VISUAL LITERACY FOR ARCHITECTS II
Instructors: Taryn Mudge, Andrew John Wit, Ann Dinh, Peter Griffin
SPRING 2023

PART 1B: BOULEAN BIJOU
DUE: TUESDAY, FEBRUARY 07

BACKGROUND:
This exercise moves beyond the 2D modeling tools to explore volumetric and solid modeling techniques. In each step of this assignment, you will be required to model in full, "real world" scale, but produce drawings and models at the scale indicated on each part of the assignment.

SKILLSETS + TOOLSETS:
Rhino3D – Adobe Illustrator, FormLabs – PreForm

SKILLS LEARNED:
Rhino – polygon, sweep1, sweep2, loft, network surface, boolean operations, section, contour, extracting linework, mesh shelling and clipping plane

Adobe Illustrator – linework, annotation

EXERCISE:
In this exercise, we will begin by designing a jewel that visitors will stand within and around. This object will take on complex formal conditions that will allow visitors to orient themselves in space and explore the intricacies of the jewel itself. Over the course of a day, the atmospheric effects of the space around the jewel will change, allow the jewel to present itself in different ways.

STEPS:

+ Begin by selecting a series of large and small polygons in Rhino3D. These will be the starting blocks for the mass and boolean geometry. Use the sweep, loft, and network surface tools to generate union, difference, and split volumes.

+ Create a series of masses and boolean geometries. Using a minimum of 3 and a maximum of 5 boolean operations alter the base mass to relate, in a precise way, to the human body. Your jewel must be larger than 3' x 3' x 3' but no larger than 8' x 8' x 8'. You will need to use the "bounding box" command to generate a box that surrounds your jewel. The bounding box width + length + height must be less than 22 linear feet.

+ Select your three most successful masses and prepare a plan, front elevation, side elevation and section drawing of each unique mass. Use Make2D with hidden linework to create drawings that explain the size, shape, and relationship the jewel has to the human body.

Temple University: Tyler School of Art: Department of Architecture
ARCH 1012: VISUAL LITERACY FOR ARCHITECTS II
Instructors: Taryn Mudge, Andrew John Wit, Ann Dinh, Peter Griffin
SPRING 2023

+ After completing your 4 drawings in Rhino, export them to Illustrator with layers, at 1/2" = 1'-0".

+ Use Adobe Illustrator to edit and refine the linework of all drawings.

+ Add scale figures to the drawings. If you need specific poses, ask a classmate to take a photo of you in the pose you need.

+ Use the provided 8.5" x 11" template to layout your drawings.

+ Save the Illustrator file as both an .AI & .PDF file type. Keep all original image files for backup.

DELIVERABLES + SUBMISSION FORMAT:

+ (3) Individually exported 8.5" x 11" sheets printed and pinned up on on Tuesday, February 07.

+ Prior to the presentation submit a single 8.5" x 11" Portrait PDF file with individual 3 pages digitally to your section's OneDrive folder. Please us the nomenclature "**_P01b_lastname_first initial.PDF_**" for the file name. If, for example, your name is "Bob Smith" you will save your work using the nomenclature "**_P01b_Smith_B.PDF_**."

+ Following the review, you can make edits and submit a revised file if you choose to. All revised files are due by 5:00pm Sunday, February 06. Late work will not be accepted. These files should update errors or suggestions mentioned during the pinup and use the nomenclature "**_P01b_lastname_first initial_V2.PDF_**"