ARCH 1012: VISUAL LITERACY FOR ARCHITECTS II
Instructors: Taryn Mudge, Andrew John Wit, Ann Dinh, Peter Griffin
SPRING 2023

Skyspace 1 – James Turrell

PART 2C: OPENINGS & OCCUPATION - REVISED
DUE: THURSDAY, APRIL 27
PDF PORTFOLIO DUE: THURSDAY, MAY 04

BACKGROUND:
While architecture can be defined through specific surfaces, made up of underlying patterns, it requires an assembly of thickened masses, made of numerous elements to generate space. The surface of architecture is the outmost face, that is most immediate to our occupation; behind that face lies the structure and systems that allow for the volume of architecture to exist.

SKILLSETS + TOOLSETS:
Rhino3D, Photoshop, Rhino and VRay for Rhino Rendering

SKILLS LEARNED:
Rhino – volumetric modeling, Boolean operations, daylight simulation, clipping plane, section, split VRay: sun systems, render output, camera settings, indirect illumination systems, VFB channels
Adobe Illustrator – composite drawings, dotted linework, live paint, linked resources.

EXERCISE:
In the final phase of assignment two, each of you will design a space for your jewel to be housed, viewed, and perhaps interacted with. To achieve this, you will need to think spatially, through volumes, to create three chambers within a 48' x 48' x 24' volume. These volumes should have distinct characters and explore temporal opportunities throughout the course of a day. The volumes should extend, in some instances, through the boundary of the mass to become aperture for daylighting your spaces. The volumes must be situated in a way that creates a procession in and through the mass, on the way to, and from, the jewel.

STEPS:

+ Create a 48' x 48' x 24' (L x W x H) box

+ Use the solid modeling techniques explored this semester to create a series of Boolean operations, resulting in 3 distinct voids contained within the 48' x 48' x 24' mass.

+ These operations should also provide daylight into the mass and create a space to display the jewel.

+ The 3 voids should each take on a different character. These might be tall spaces, long spaces, dark spaces, heavy spaces, etc.

+ Place the mass within your designed site

+ Place the jewel into the room meant for viewing and displaying it.

+ Use the clipping plane tool to determine a plan cut and two sections that explain the space.

+ Make copies of your model and use vertical and horizontal planes to Boolean split the volume for each section.

+ Use the techniques explained in the video tutorial, to generate line drawings for the plan and two sections.

+ Export these drawings to illustrator

+ Adjust the line weights, and poche

+ Add scale figures

+ Use the techniques explained in the video tutorial to create a rendered axon drawings (composite drawing).

DELIVERABLES + SUBMISSION FORMAT:

+ Site plan drawing with topography at 3/32" = 1'-0"

+ Plan drawings at 3/16" = 1'-0" (1 or 2 plans, depending on your design)

+ Two elevations with hidden line work at 3/16" = 1'-0"

+ 1 Section with hidden line work at 3/16" = 1'-0"

+ 1 Sectional axonometric composite drawing with underlay rendering at 3/32" = 1'-0"

+ 3 Renderings along the procession (1 exterior approach, 1 interior view with Jewel, 1 of your choice) – Renderings must be 150dpi or larger.

+ All drawings placed on 11"x17" pages with drawing title and scale indicated.

+ Prior to the presentation on April 27th, submit a single PDF file with individual pages digitally to your section's OneDrive folder. Please us the nomenclature "*P02c_lastname_first initial.PDF*" for the file name. If, for example, your name is "Bob Smith" you will save your work using the nomenclature "*P02c_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, April 30. Late work will not be accepted. These files should update errors or suggestions mentioned during the pinup and use the nomenclature "*P02c_lastname_first initial_V2.PDF*"