

PRE-MODERN

[illegible]

UV-A

HYPOTHESIS:

Although the eastern side windows of the room are larger than the western side windows, the device recorded low Percentage of UV-A in the east side ^{0.1%} whereas in the west side windows were 2.2% - 3.4%. This is maybe

UV-A RADIATION:

UV radiation from the sun has always played important roles in our environment, and affects nearly all living organisms. Radiation at the longer UV wavelengths of 320-400 nm, called UV-A, plays a helpful and essential role in formation of Vitamin D by the skin, and plays a harmful role in that it causes sunburn on human skin and cataracts in our eyes.¹

because of the Porch that shaded and blocked the sunlight to go through to the eastern side windows.

UV-A enters a building when it penetrates the glass in a window. Glass can block a certain amount of UV-A and some types of glass can block UV-A entirely. Below are examples of different window glass and respective UV-A transmittance.

Smooth ordinary glass - 74.3%

Laminated glass - 0%

Ordinary Glass with Sunlight Control Film - 0%

Green Glass - 0%

Blue Glass - 56.8%

UV-A SENSOR:

The UV-A Sensor is an attachment to the Vernier Hand Held Unit. To observe UV-A levels, plug the sensor into the side of the Hand Held Unit. The Unit will automatically enter the appropriate screen where UV-A is being observed in mW/m² (milliwatts per meter squared).

When collecting data in your building, be sure to stand for at least 2 seconds in each space marked on the following page before recording your findings. For UV-A, it is helpful to record a range (ex: 26-27 mW/m² or 5,012-5,190 mW/m²).

¹ Information found at <http://earthobservatory.nasa.gov/Features/UVB> written by Jeannie Allen.
"Ultraviolet Radiation: How it Affects Life on Earth"

Simon Benson House

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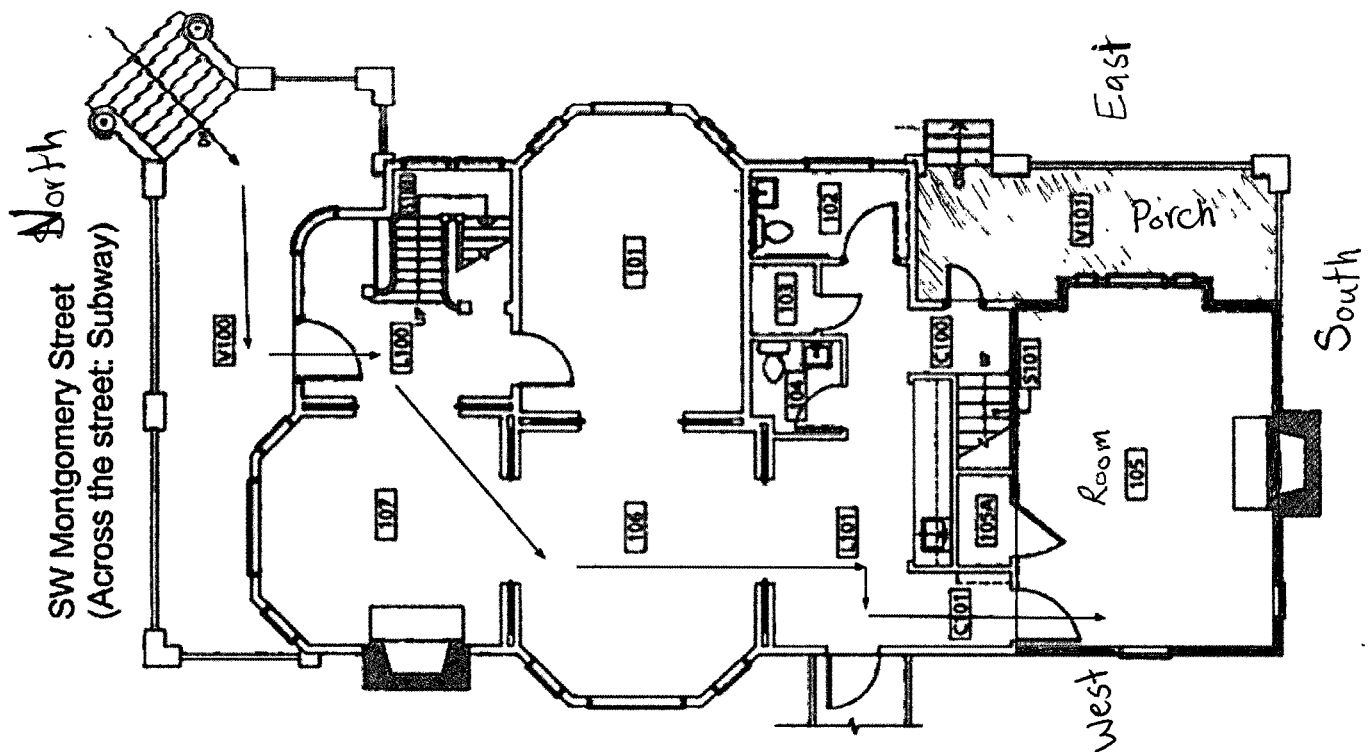
LOCATION: 1803 SW Park Ave
Portland State University
Portland, OR 97207

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INSTRUCTIONS FOR ACCESS: Get in contact with Justin to confirm the Simon Benson House is open to the public on the day you wish to conduct your studies.

PSU South Park Blocks



DIRECTIONS: Enter the Simon Benson House through the main entrance which is located on the corner of the South Park Blocks and SW Montgomery Street. Follow the arrows (check in with front desk: room 106) to room 105 known as the Back Conference Room.

- time stamped on d2l NO LATER THAN 11:59pm on the day it is due; otherwise it is considered late and will incur late penalties; you are STRONGLY ENCOURAGED to post the night before.

Required Content:

- your name, the building's name, the building's location, date(s) of data collection
- Stating the architectural question(s) you are pursuing
- Stating your hypothesis of how you think your building might perform related to the question(s)

Narrative Response: 400 minimum words-500 maximum words

You are required to address the following topics in your description of the data collected

- ① The original question(s) you are addressing and your original hypothesis (and why/how you thought that way before data collection.
- ② The nature of the data you collected and what you learned from it.
- ③ A reassessment (or affirmation) of your hypothesis and how it relates to the question(s)
- ④ The larger contexts and/or implication of your revised thinking (based on the data collection) for; buildings designed during this era, and/or buildings of this climate; and/or buildings of the typology; and/or buildings with this type of construction/materials. You are not required to discuss all 4; but you are required to discuss and speculate

• References you are required to have references. Reports that have only web-based sources will receive the lowest grade; Reports that have a mix of web and books will receive a higher grade; reports that have a mix of web based sources, books, and journal articles will receive the highest grade.

- Data Table
Organize the data you took in the field in a clear to read table of some kind that is clearly labeled to
- include units of data collected
- References
In order to write your narrative response with excellence, it will most likely require research (particularly to address topic 4). References for that research should go here.
- Field Notes
You are required to take field notes on the sheets handed out in class on W 26 April.. You are required to scan this and include it in the write up report you are producing above.

What you hand in should LITERALLY look like this in terms of formatting (i.e. use the same headers):

Name:

Building Name & Location:

Date(s) of Data Collection:

Architectural Question:

Hypothesis Based on Question:

Narrative Response: (498 words)

Data Table:

[Display the data collected (as an individual) in a clear to read table or graphic]

References: