

## Meeting Agenda:

Verify proper communication and data sharing has been established. Discuss and augment project goals. Determine budgetary constraints. Develop tasking.

**I) Communication and Data Sharing**

- a. Verify everyone has access to zoom meeting
  - i. Confirmed
- b. Verify everyone has access to discord
  - i. Confirmed
  - ii. This will be our main source that is regularly updated.
- c. Verify everyone has access to one drive for file sharing
  - i. Minutes will be uploaded to the OneDrive and bblearn weekly.

**II) Project Goals**

**Design Basis** – Fully Integrated Sign OR ability to attach to existing signs

- Keeping the design universal so that this has the potential to be on other campus', etc.
  - Need to check with we can even add on to current poles.
    - o Check with Idaho transportation, university facilities, and with the city of Moscow
- a. Primary – Goals that WILL be accomplished by the end of Spring 2021
    - i. Lighting Rig
    - ii. Solar Panel
      1. Primary means of dc generation.
      2. How much power do we need?
      3. Some sort of power regulation.
    - iii. Battery Storage
      1. Primary means of storage.
      2. How many amp/hours do we need to provide.
    - iv. Power Management
      1. This will expand over time if we reach our secondary goals.
      2. Regulate power safely.
      3. Some sort of controller system (the brain of this).
        - a. When to turn the battery on, when to charge the battery, etc.
  - b. Secondary – Goals that we will STRIVE to complete by the end of Spring 2021
    - i. Integrated Wind Turbine & Waterwheel
      1. Can we do dc generation with this?
      2. Go directly to ac and need to convert?
    - ii. Rain Catch
      1. Funneling the water.
    - iii. Other Power Storage Means
      1. On paper proof of concept to add to the project.
  - c. Tertiary – Goals that we would LIKE to accomplish by the end of Spring 2021
    - i. Automatic, low or no power, solar panel orientation
      1. Adjusting the solar panel throughout the day.

**III) Deliverables This Week**

## a. Budget (17th)

## i. What funding is available?

1. The department has some funds that seniors designs can apply for.
  - a. Lei will distribute the info later in the semester and due date will be included on that.
2. \$500-\$1000
3. Some funds form NIATT or from the sustainability on campus, outside funders
4. We can do a rough estimate for now.
  - a. Lights
  - b. Etc.
  - c. Poster - \$120

## ii. How do we need to fund primary objectives?

**IV) Tasking**

- a. Establish Contact with University Facilities
- b. Establish Contact with NIATT
  - i. What are lighting requirements?
  - ii. Can 3<sup>rd</sup> parties augment existing signs?
- c. Develop Timeline to complete objectives
- d. Determine Power Requirements for production and storage

-Dr. Johnson will direct us to a wiki page that we can reference from another project

- [http://mindworks.shoutwiki.com/wiki/Solar\\_Backup\\_Power\\_Generation](http://mindworks.shoutwiki.com/wiki/Solar_Backup_Power_Generation)

- look at their references

-Upload the contract, meeting minutes, and the budget to Bblearn

- When we do our budgeting, make educated guesses, overestimate costs, everything is updated constantly so don't stress too much.

Tasks to do by 09/22/20:

Charlie

- Upload today meeting minutes

Kathryn

- Upload the budget by Thursday 09/17/20

Jason

- Get in contact with university facilities and figure out legalities

Collectively

- Figure out power requirements for production and storage.
- Developing a calendar / timeline

Finished the meeting at 1:35 pm