

Original Problem

- Restricted access to lab documents.
- Disorganized experiments documentation. Organized by course number only, with 8 character name.
- Experiments disappearing from memory. ie, crater lab, or projectile motion.
- Equipment stored in 16 different rooms.
- Equipment of unknown purpose taking up space.

Problems with former attempts

- Heavy reliance on convention and standardization.

The Solutions

- Organized Lab Documents - Archive.
 - **Archive what students use, since that is what their comments will be based on.**
- Department Wide Access to Information.
 - **IT working on adding to LDAP (similar to CAS) for controlled authentication.**
- Transferable Knowledge.
 - **Place to hold all important information about a lab. Equipment, original papers, data, etc..**
- Platform for Collaboration.
- Foundation for Future Development.
- Created Room to Grow.
 - **Remove what we don't need and create more physical space.**
- Tools for Ease of Upkeep.
 - **Tools for maintaining, manual for administrator.**
- Mobile friendly.

Use Cases

Instructor

- What did the last instructor do?
 - **211 -> 2017 -> Fall**
- What labs do we have for an Optics course?
 - **clear filters -> Optics -> most recent**
- What labs do we have on waves?
 - **clear filters -> Wave Mechanics -> most recent**
- What math skills are required?
 - **drop down menu on standing waves**

Lab Developer

- I want to make changes to the current labs for my course?
 - 211 -> 2017 -> Fall -> ZIP
- Is there any background info on this lab?
- Is there a template for a spreadsheet?
- Do we have a lab on "Ampere's Law"?
 - clear filters -> search "Ampere"
- Time to build a brand new lab?
 - main page -> Instructor -> Lab LaTeX template
- How where those diagrams made?
 - main page -> Instructor -> Tikz LaTeX example - view

Developing a new Experiment Slide

Technical Staff

- What equipment is needed for the lab?
 - 211 -> 2017 -> Fall -> Static Equilibrium of a Balance Beam
- How many labs is this equipment used in?
 - 211 -> 2017 -> Fall -> Static Equilibrium of a Balance Beam
- What is this item, and why do we needed it?
 - inventory -> ST037 -> C3 -> Fluke Multimeter
- What equipment needs attention?
 - inventory -> 1-2 -> Fluke multimeter

Future Work

- Continue to populate disciplines and topics
- Authentication
- Host Simulations
- Demonstrations