

Expectations for HiP project – Honors for Physics 248

Time Requirements and Meetings:

You are expected to spend an average of 1 hour per week on researching, developing, and producing an explanation for one of the displays in the Physics Museum. You will also be required to meet with David Meshoulam and Ryan Gavin once a month for 15 minutes. During the first meeting you will build a calendar with due dates for different stages of your project.

The Display:

The display needs to be made of three panels, each engaging a targeted audience.

1. *Elementary School Students.* This explanation needs to focus on the conceptual aspects of the exhibit. It should connect the concept with everyday life, and should avoid scientific jargon. The more basic, the better.
2. *High School / University Students.* This audience is more intellectually sophisticated. Therefore, the explanation may include scientific vocabulary, though you should try to avoid equations. There should also be an attempt to connect the display to technological and real world issues.
3. *The General Public.* This panel should engage with social and historical issues. The panel should place the exhibit in its cultural context. This section will require library research and discussion with professors in the Physics and History of Science Departments.

The Final Product:

The final product needs to be of publishable quality for display in the museum. This means that it needs to be aesthetic, conceptually accurate, and well written. If funds become available we may be able to obtain high-quality printing.

It needs to be provided in hard copy format as you will like it displayed in the museum and in electronic format for future reference. For an example of expectations for content, please see the example that I created for “Newton’s Cradle”.

Options

For a thorough list of options, please feel free to peruse through the Physics Museum near the entrance to Chamberlin Hall. A partial list of exhibits is included below for your reference:

- Plastic Roller Coaster track
- Electro-magnetic turntable
- Gyroscope
- Two pendulums (showing resonance)
- Concave, Convex Mirrors
- Lenses (that create real images)
- Light Experiments (colors and diffraction)
- Probability Curve

Contact:

Please talk to Professor Shiu or contact David Meshoulam (meshoulam@wisc.edu) to get involved.