



SOCIETY OF PHYSICS STUDENTS

An organization of the American Institute of Physics

Marsh W. White Award Proposal

Project Proposal Title	The Observatory Open Hours: Celestial Safari!
Name of School	Mount Holyoke College
SPS Chapter Number	Zone 1 SPS Chapter 4555
Total Amount Requested	\$500

Abstract

The SPS chapter at Mount Holyoke College hosts Observatory open hours throughout the academic year. Intended for all ages, our goal is to boost motivation and interest in the STEM fields. Using our historic Clark 8" telescope and 2 state-of-the-art Unistellar eV Scope 2 telescopes we have no trouble observing.

Proposal Statement

Overview of Proposed Project/Activity/Event

Whenever the observing conditions are right, we will use our two different telescopes the historic Clark and the eVscope 2s as our observational tools. We will offer snacks and beverages for everyone so they can enjoy and have a good time. Our dedicated volunteers along with the director of the observatory will be there to provide a wealth of information about what people can see through the telescope as well as how the telescopes work. Whether they see the Snowball or Dumbbell nebula, among other things they will be sure to learn how far these nebulae are and which constellation they are in. The Observatory open hours are open to all! We welcome friends and family, as well as the general public to observe the sky with us. Our primary goal is to boost motivation and develop an interest in physics and astronomy. We want to show that science is much beyond what is taught within the four walls of a classroom and encourage scientific exploration.

We started doing this project last year as the observatory was at risk of being torn down by the college. Professors advised us to have open houses so we could not only save a historical building but also do something fun for our community. The SPS board of 2021 hosted this event using only the Clark 8" telescope but it still gained a lot of popularity. This year the college was able to provide 2 new observational telescopes for one of our classes and were given the opportunity to use them by the director of the observatory. Thus the popularity of the event increased. The new telescopes made it more accessible to find objects and it was easy to take and share photos of what the telescope was observing. Here are some pictures taken from the telescope and a press review of our event.



How Proposed Activity Promotes Interest in Physics

Because of the eVscope 2 telescopes we see a lot of students who are not physics majors and the general public at our events. They love to look at stellar objects that are not visible to the naked eye. The eVscopes are usually reserved for the astronomy course named "The Sky" which is one of the most popular classes in our college. The class can only have 18 people at a time but it usually has around 80 waitlisted people. The only time we can use the telescope outside class is during open observatory hours. Everyone is welcome so it sparks the interest of the general public as well as students.

In the past, we had visiting professors from other colleges, children, K-12 students, and interested adults. With the newer telescopes, they can choose what object(galaxy, nebula, comet, planet ect.) they want to look at using an app and save pictures of the object.

Unfortunately, we could not host this more than a couple of times because of a lack of budget. We have to order snacks, maintain the telescope, and maintain the observatory classroom. Our school is only able to fund a couple of the events.

Plan for Carrying Out Proposed Project/Activity/Event

- **Personnel -**

The event will be planned by our SPS board, which is comprised of 5 students. We plan events in advance and we all plan on being there to help manage the event and be available to answer questions.

- **Marketing -** We will send out emails and encourage students to share it with their family and friends to spread the word, we have posters, and we also share posts on our Instagram page to reach a wider audience.

- **SPS member participation -**

All SPS board members act as volunteers for the event. There is no need for additional volunteers.

- **Expertise -**

Additionally, the director of the observatory (who is also an astronomy professor) will be there to help explain the science behind what people see through the telescope.

Project/Activity/Event Timeline

These dates are approximated because it depends on the weather. These may shift. The preparation we are done a day prior and again 2 hours prior to the events.

This semester-

Oct 20, 2022 , the 9:00 pm-10:00 pm

Spring 2023:

March 1, 2023, 9:00-10:00 pm

March 10, 2023, 9:00-10:00 pm

March 15, 2023, 9:00-10:00 pm

March 25, 2023, 9:00-10:00 pm

April 5, 2023 9:00-10:00 pm

April 13, 2023, 9:00-10:00 pm

April 21, 2023, 9:00-10:00 pm

April 29, 2023, 9:00-10:00 pm

May 9, 2023, 9:00-10:00 pm

May 20, 2023, 9:00-10:00 pm

Activity Evaluation Plan

We take attendance for these events. We also are aware of the questions the attendees ask so we get an idea of what people like to see during the event and keep them in mind for the next one.

Budget Justification

The items we listed in the budget will be used to aid in accessibility. We need more red flashlights so that our attendees can carry them. We only have a few working ones, so SPS members would carry them and make sure no one gets hurt. We have foldable chairs listed so that we can accommodate those who need to sit down. We also put down snack and beverage expenditures so that the event can be more enjoyable and comfortable.