



SOCIETY OF PHYSICS STUDENTS

An organization of the American Institute of Physics

Marsh White Award Report Template

Project Proposal Title	The Observatory Open Hours: Celestial Safari!
Name of School	Mount Holyoke College
SPS Chapter Number	Zone 1 SPS Chapter 4555
Project Lead (name then email address)	Mysha J. Khan khan59m@mtholyoke.edu
Total Amount Received from SPS	\$500
Total Amount Expended from SPS	\$432.90

Summary of Award Activities

The Mount Holyoke SPS Chapter received Marsh White funding for hosting Observatory Open Hours. Over the course of the semester we held over 10 sessions in which we invited students, staff, and members of the public to look through our Unistellar eVscope telescopes while we described what the celestial objects they were seeing and answered questions. We had snacks in the historical Williston Observatory and, if the weather was bad, we watched different sci fi movies. It was a privilege to bring interest back to the observatory and we hope to continue the Observatory Open Hours events.

Statement of Activity

Overview of Award Activity

On Saturday and Sunday nights, the Mount Holyoke Chapter of SPS hosted open hours for the Williston Observatory on campus. It was an experience that most students would never get to see and use a telescope from the 1800s and learn how to operate a manual telescope. On clear nights, MHC SPS would use three unistellar telescopes to facilitate deep space observations. These telescopes are easier for beginner observational astronomers to learn to use because they have a GPS system and can be controlled through an app. The manual telescope was used to look at celestial objects within the solar system. The unistellar telescopes allowed for more freedom with the students outside of MHC SPS as they could be taught how to properly use them. On cloudy nights, MHC SPS brought snacks and hot beverages and showed a space themed movie to foster community between students of all different departments. This project allowed for students outside of the astronomy department to be in the observatory, the oldest academic building on campus, and learn how to use telescopes. These events were open to the entire student body, the nights that were chosen were found to be the nights to be the least likely for students to have other obligations. This fact and the amount of open hours that were held allowed for almost any student with an interest to be able to fit the event into their schedule. One night, the entire lacrosse team came to observe, all but one of whom were not members of the physics or astronomy department and most of whom did not even know that there was an observatory on campus. This project brought countless students who would never otherwise interact with these departments to the observatory and shared with them the joy of looking at the stars.

Impact Assessment: How the Project/Activity/Event Promoted Interest in Physics

Observatory Open Hours promoted interest in physics among students and the general public by inviting them to the unique experience of looking into space using high powered Unistellar eVscope telescopes. Not only this, but guests were able to ask questions and be privy to the information of our physics majors and the director of the observatory. Our goals were to gather interest for the observatory as it was at risk from our college of being destroyed. Through our events we were able to show how valuable a place like Williston Observatory is; not only for the students, but also for the curious mind. We often had great turn out and interest for this event, even gathering interest from the four other neighboring colleges. Moreover, we have been asked if we will be continuing this event next semester. Hence, our chapter would call our Observatory Open Hours a success as we have fostered an interest for physics and astronomy in not only our own community, but in our neighboring communities as well. We feel that we have established Williston Observatory as a valuable feature on the Mount Holyoke campus.

Key Metrics and Reflection

Who was the target audience of your project?	Open to all everyone
How many attendees/participants were directly impacted by your project? Please describe them (for example “50 third grade students” or “25 families”).	We had more than 10 observatory open hours and each time a different amount of people showed up and not everyone stayed for the entire time. So it ranged from 8 to 35 Mount Holyoke Students, staff, and family members
How many students from your SPS chapter were involved in the activity, and in what capacity?	Fifteen SPS members participated in each event and 2-3 board members were present at each event.
Was the amount of money you received from SPS sufficient to carry out the activities outlined in your proposal? Could you have used additional funding? If yes, how much would you have liked and how would the additional funding have augmented your activity?	The money we received from SPS was sufficient to carry out our plans for the events.
Do you anticipate repeating this project/activity/event in the future, or having a follow-up project/activity/event? If yes, please describe.	Yes. We will do the same thing next semester and we are planning to turn it into a tradition.
What new relationships did you build through this project?	We met new people who were first years and they said they are planning to try out physics and astronomy courses because it seemed very fun! We also met students from the neighboring colleges who were interested. So we made new friends!
If you were to do your project again, what would you do differently?	I think we would change the timing from 8-9 instead of 9-10

Press Coverage (if applicable)

Williston Observatory acquires new telescope, Unistellar eVscope

Williston, Vermont - The Williston Observatory, a non-profit organization dedicated to the study of astronomy, has recently acquired a new telescope, the Unistellar eVscope. This new telescope is a significant upgrade from the previous one, and it will allow the observatory to observe a much wider range of celestial objects. The observatory is located on a hillside overlooking the town of Williston, and it has been a popular destination for astronomy enthusiasts for many years. The new telescope is expected to be installed in the observatory's main dome in the coming months.

The Unistellar eVscope is a revolutionary telescope that uses a unique design to provide a wide field of view and high resolution. It is a compact and portable telescope that can be used in a variety of settings. The observatory is excited to have this new telescope and to be able to share it with the public. The observatory is a non-profit organization and it is open to all. The observatory is a great place to learn about astronomy and to see the night sky. The observatory is a great place to see the stars and planets. The observatory is a great place to see the beauty of the night sky.



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There was coverage in the Mount Holyoke College newspaper of a previous event held at the Williston Observatory. The newspaper is read by the majority of the student body. This venture was paid for by the Mount Holyoke chapter of SPS and we decided from the positive reaction to this event and the coverage to ask for the Marsh White award to help us continue holding these events due to its enormous help towards making people interested in physics and astronomy.

Expenditures

All of our expenses were directly related to facilitating our observatory open hours events and follow the anticipated expenses listed in our proposal form. We purchased cider donuts as snacks and instant coffee as drinks for guests to enjoy during our events. This had the added benefit of improving the advertising of our events. One of the weekends, the market we purchased the cider donuts from was sold out, so we alternatively purchased dessert breads (banana bread, zucchini bread, pumpkin bread, and a lemon loaf) and raspberries within the originally planned budget for that weekend's cider donuts. Our observatory previously had few flashlights that had seen a lot of wear and tear, so we purchased additional flashlights to ensure safety while outside in the dark. This was especially important because the stairs in front of our observatory are dangerous to walk on in the dark. Lastly we purchased folding chairs for guests to sit outside. We wanted to make sure that our events are accessible regardless of physical ability.

Expenditure Table

Item	Please explain how this expense relates to your project as outlined in your proposal.	Cost
Cider Donuts	The cider donuts were purchased as snacks for guests to enjoy during our events.	\$110
Alternative Treats (cider donuts were sold out that day)	See above. The cider donuts were sold out that weekend, so we purchased similar baked goods as an alternative.	\$49.96
Flashlights	We purchased additional flashlights so that all participants would be able to use one. This was also important for safety during our events.	\$79.65
Folding Chairs	We purchased folding chairs to allow visitors to have a place to sit outside near the telescopes. This helped improve the accessibility of our events.	\$133.39
Instant Coffee	The instant coffee was purchased as refreshments for guests.	\$59.90
Total of Expenses		\$432.90

Activity Photos

Picture credits: Vice President, Ekaterina Fraser

Picture	Caption
 <p>A deep sky image of the Great Orion Nebula (M42) showing a bright, glowing cloud of gas and dust. The nebula is surrounded by several stars. The image is framed by a white circle. At the bottom, there is a curved white line with the text: UNISTELLAR - M42 - Great Nebula in Orion - 28sec. - 42°N 73°W - APR 08 2023.</p>	<p>Deep Sky image of the great Orion Nebula</p>
 <p>A deep sky image of the Whirlpool Galaxy (M51) and its companion galaxy, NGC 5053. The Whirlpool Galaxy is a prominent spiral galaxy, and the companion is a smaller, more irregular galaxy. The image is framed by a white circle. At the bottom, there is a curved white line with the text: UNISTELLAR - M51 - Whirlpool Galaxy - 2min. - 42°N 73°W - APR 08 2023.</p>	<p>Deep Sky image of the Whirlpool Galaxy merging with its companion</p>



Deep Sky image of the rare comet that passed by us



Deep Sky image of M46 Sky Cluster



Deep Sky image of the Owl Nebula



Deep Sky image of the M65 galaxy.



Celebration during the last night of open hours.



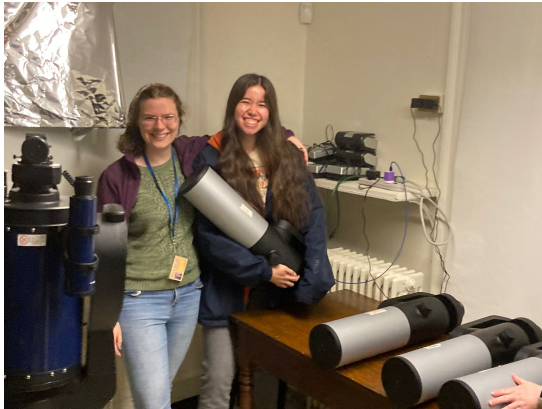
SPS Secretary Sasha Toole peering at the sky.



Students enjoying snacks in the observatory.



Students having a blast learning about our observatory's history.



Seniors Abigail Tadlock (left) and Anna Maria Moran (right) holding a Unistellar eVscope 2 telescope and having a great time.



If you have any questions, please contact the SPS National Office Staff
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