"Continuing the Mentoring Program for First Year, First Generation Physics Students"

2013 Future Faces of Physics Final Report

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On behalf of the University of Southern Mississippi's Chapter of the Society of Physics Students, I would like to thank SPS National for giving our chapter the opportunity to use the 2013 Future Faces of Physics Award, allowing us to continue on with our mentoring program developed in 2012 for first year, first generation physics students. While implementing the award last year, our chapter considered the mentoring program a trial run, allowing us to make improvements for future years.

This year, our chapter decided to run the mentoring program for an entire academic year. SPS members kicked off the mentoring program by visiting introductory physics courses on campus to recruit mentees and invite them to become members of the Society of Physics Students. In the previous year, only one student consistently stayed in the mentoring program for the spring 2012 semester. As a result of our aggressive advertising, we were able to recruit 5 mentees to be paired with upper classmen in the physics department as mentors. The mentees were then distributed a survey created by Amanda Palchak, SPS Chapter President, inquiring about the mentees' interactions with the Department of Physics and Astronomy, their knowledge on degree plans, and their involvement in the Society of Physics Students. The exact survey was given for a second time at the end of the academic year in order for our chapter to recognize changes within these mentees after their first year in the mentoring program.

As part of "Continuing the Mentoring Program for First Year, First Generation Physics Students," our chapter was very interested in inviting guest speakers to interact with the mentors and mentees. On February 26, 2013, Mr. Darnell Moffett, a USM Department of Physics and Astronomy alumnus, spoke at a luncheon as part of the mentoring program. As a USM post graduate, he pursued a career as a geophysicist with Exxon for 20 years. After his time traveling all over the world with Exxon, he then returned to Mississippi to become a preacher and a physics teacher in free time. Mr. Moffett's visit began with an SPS luncheon, giving the students time to ask him questions about his time at Exxon, his time as a USM physics student, and his experiences as a world traveler. Mr. Moffett was an inspiration to the students, and he gave them confidence to pursue their future endeavors. Following the luncheon, Moffett gave a power point presentation to SPS mentors and mentees titled "STEM RIGOR, REWARD, and RESOURCES." His talk addressed the knowledge and skills students gain as physics majors as well as the importance of seizing opportunities. Many of the resources in Mr. Moffett's presentation were found on the American Institute of Physics' Statistical Research Center website, which has proven to be a very useful tool for our undergraduate physics majors.



Mr. Moffett (pictured left) speaking to the 2012-2013 Mentees

After mentees were matched with their respective mentors, the groups created their individual schedules. Mentors were to report back to SPS President Amanda Palchak with updates and reports regarding meetings with mentees. At the end of the academic year, mentees turned in results for the second survey and mentors turned in a final report with feedback and suggestions on the mentoring program. In his final suggestions on the mentoring program, SPS Member Steven Kirkup report that he and his mentee, Mikey Tingstrom, were high school friends who spoke on a semi regular basis. Although none of their meetings were considered formal, Steven reported "I think the advice I've given him will be beneficial, nonetheless." According to Mikey's survey results, his interactions with members of the Society of Physics Students became more frequent over the course of the mentoring program. His survey results also showed that after completing the mentoring program, his preparedness for his academic career as a physics major increased from a 3 to 4, with a score of 5 being the most prepared.

Other mentees' survey results gave similar feedback, and the scores proved that the mentoring program was only beneficial to the students. SPS Treasurer and mentor Erica Bloor report with some constructive criticism in her final report stating, "I feel that more group events instead of individual meetings would be much more effective at allowing the students to interact in a less 'stuffy' school environment." Erica also organized an outing to a burger joint for the mentors and mentees on April 27th which was followed by a game of Apples to Apples. Erica stated that everyone had a great time, and it was a great opportunity for the group to bond before the end of the semester.

Much like last year, there will always be improvements made to the SPS Mentoring Program for First Year, First Generation Physics Students. However, this year we successfully mentored 5 freshmen in the physics program, all of which will be continuing their physics studies and SPS memberships. At the end of the 2013 spring semester, many mentees in the program were elected as 2013-2014 SPS Officers. I would like to thank SPS National once again for giving our chapter this esteemed award for the second year in a row. It is my hope that our chapter will continue applying for the Future Faces of Physics Award for years to come. I have no doubt that the SPS Mentoring Program for First Year, First Generation Physics Students will only grow and improve with time.



2012-2013 SPS Mentors and Mentees