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

Society of Physics Students Chapter #6626
University of Southern Mississippi
Dept. of Physics and Astronomy
118 College Dr. #5046
Hattiesburg, MS 39406

Principal Proposer:
Amanda Paichak
E-mail: amanda.paichak@eagles.usm.edu

Faculty Advisor:
Dr. Alina Gearba
E-mail: alina.gearba@usm.edu

USM Tax ID #: 64-6000818

Amount requested: $300

Submitted: October 15, 2012
Continuing the "Mentoring Program for First Year, First Generation Physics Students"

Summary of Previous Funding:

Upon receiving the 2012 "Future Faces of Physics Award," the University of Southern Mississippi chapter of the Society of Physics Students created a "Mentoring Program for First Year, First Generation Physics Students". Three freshmen expressed interest in our mentoring program last year, but we were able to retain only one. Although the quantity of students in the mentoring program was lacking, we had success with the individual student in the program. Throughout the spring semester, the student benefited from the constant interaction with the physics upperclassmen. In addition, the student became an active SPS member and was elected "Events Recorder". We decided to continue the mentoring program during this academic year with the goal of increasing the number of target students in the program. By implementing a yearlong program, along with better planning and time management, we hope to significantly increase the success of our mentoring program.

Purpose:

Continuing the "Mentoring Program for First Year, First Generation Physics Students," is a three-fold mentoring program to be completed by our SPS chapter upon receiving the "Future Faces of Physics Award" from the Society of Physics Students National Organization. The mentoring program addresses and solves the issues first generation physics students come across during their first year in college. Almost half of all first generation physics majors at the University of Southern Mississippi change their field of study after their first year in the physics program. This loss is the result of a lack of high school physics courses and an inability to cope with both calculus and calculus based physics courses in college. "Creating a Mentoring Program for First Year, First Generation Physics Students" was a program that the Society of Physics Students began last spring in order to recruit and retain this specific group of physics students. Given the limited time we had with last year's program, we will be continuing the mentoring program throughout this entire academic year with three main goals, one of which would be possible through funding provided by the 2013 "Future Faces of Physics Award."
A Solution to the Problem:

In the first part of continuing the "Mentoring Program for First Year, First Generation Physics Students," our SPS members visited introductory level physics courses and invited physics majors as well as any other first generation college students with an interest in science to join us for a welcome luncheon that was held on September 25, 2012. As a result of last year’s minimal turn out, SPS was more aggressive in advertising for the event. Our increased efforts were directly correlated with the highest increase in new SPS members our chapter has ever seen. Following the luncheon, our new member tally came to an outstanding fifteen students, six of which were freshmen eligible for the mentoring program.

We are now entering the second part of the program which will take place over the course of the entire academic year. The Society of Physics Students upperclassmen will provide tutoring, mentoring, and general support in order to keep the targeted physics students motivated and confident in their abilities to study physics. Three weekly tutoring sessions have been set up. The students are also invited to join us for our outreach events that we have planned for the campus and local community. In addition, we have planned an increased number of social events with the physics faculty, such as tailgating for the homecoming football game, movie night, bowling challenge, and a holiday feast. The outcome of the program will be assessed at the end of the fall semester and any necessary revamping of the program will be in place before the start of the spring semester. We believe that our new approach of advertising and students' involvement in SPS events will significantly increase our chances for success with this program.

As a closer for the academic year, the Society of Physics Students will host a banquet at the end of the spring semester for the students in the mentoring program. At this event, SPS will provide a speaker who is also a first generation college student that continued on to get a Ph.D. in physics. This event will serve as a positive ending note for the first year students, reinforcing the possibilities and potential that they possess. Upon completion of the mentoring program, it is our hope that the first year, first generation physics students in the mentoring program will return the following academic year to begin their second year as undergraduate physics students.
### Budget

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Travel Expenses for Speaker</td>
<td>$200</td>
</tr>
<tr>
<td>Room Rental for Banquet</td>
<td>$65</td>
</tr>
<tr>
<td>Food for Banquet</td>
<td>$200</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$465</strong></td>
</tr>
<tr>
<td>Requested from SPS National</td>
<td>$300</td>
</tr>
</tbody>
</table>

The remaining expenses associated with the end of the year banquet will be covered by the Department of Physics and Astronomy.