Student Learning Outcomes Assessment Summary

Physics, MS\textsuperscript{1} - Space Physics, PhD\textsuperscript{1}

College of Natural Science and Mathematics

AY 2010-11 & 2011-12

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1. Assessment information collected

Questionnaire and request for written supplemental comments.

2. Conclusions drawn from the information summarized above

During this round of SLOA there were only two respondents to the surveys (as noted in the footnote annotations in the title block). Since this number is very small, the conclusions will be rather skewed to the individual experiences of the students surveyed. The PhD student worked on research at the Geophysical Institute, while the MS student worked primarily in the department.

The PhD student was largely satisfied with the program and the advisory committee chair; however, they made a point to call out that the remainder of the committee contributed little to the student’s progress as a researcher. While the student was certain that they could recommend UAF to a prospective candidate, they also said that their reaction to the program as a whole was neutral. This is somewhat contradictory – and yet they felt that they were well prepared to continue with their professional development in a post-doctoral situation.

The MS student was very dissatisfied with all aspects of program – yet, again, would highly recommend the program to another student(?). We are somewhat at a loss to explain this consistent recommendation. This student felt that the committee was highly helpful, but that the advisor was not. The student took the time to write a scathing critique of the department’s ability to conduct funded research and support students we attract into the program.
3. Curricular changes resulting from conclusions drawn above

Due to a lack of graduating numbers and a campus-wide program review, the department conceded to a reduction in the number of programs offered in the graduate degrees. Beginning in AY 2012-13, the department will offer a MS with optional concentrations in either “physics” and “space physics”. The two PhD programs will remain the same. While we feel that this is a disservice to the students seeking out a transitional MS in “space physics”, the reality of program consolidation won out.

Since there were so few respondents to the questionnaire (half of the graduates responded), it was decided as a department that a review of our SLOA program should be undertaken. This will be left to the guidance of the incoming chair (for AY2012-13). We have few enough students that a different approach is warranted to make meaningful changes to the curriculum based on student feedback.

The department members are very cognizant of the sea change in the state of science funding. As a result, we have offered more TA opportunities to students whose advisors have had trouble keeping the students fully funded in an RA position. We have revised our contract letter language to reflect these realities, in that the students are guaranteed only the first year with TA support. At some point, the idea of 12-month support on an RA may not be sustainable.
4. Identify the faculty members involved in reaching the conclusions drawn above and agreeing upon the curricular changes resulting

The curricular changes were approved by a vote of the entire department, although the consent was not unanimous. Separate student interviews were conducted and the desire for a distinct “physics” and “space physics” degree is certainly there – each student interviewed said that they chose the degree program specifically for the name on the degree (this was the same in the author’s case back in 1992!).

The discussion of a SLOA committee and actions was begun at the close of AY2011-12 in department meetings, but not acted upon by a vote. The leading advocate for SLOA reform in the department will be on sabbatical for AY2012-13.