

2016 RHP Graduate Program Review
Action Plan

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Introduction

The purpose of this document is to create a plan of actions to be taken in response to the 2016 review of the radiation health physics graduate program at Oregon State. This plan will be reviewed in three years as part of a continuing improvement process within the School of Nuclear Science and Engineering.

Summary of Outcomes from 2016 Graduate Program Review

1. Facilities, while starting to show their age, are in relatively good condition, clean, organized, and functional. The program could benefit from increased space allocation and it appears that this is in the works for the school.
2. The program expressed a perception that inclusion of all student cohorts was unsatisfactory and that they are actively seeking institutional solutions to improve this condition. The committee suggests that the program needs to take full advantage of institutional resources available to enhance diversity and inclusion, which they may have only recently been made aware.
3. Faculty workloads are relatively high for the university and are at a level to restrict program growth. They limit faculty opportunity in establishing competitive research support, in sabbatical opportunities (simply because there is no one available to take their place) and these small numbers cap the graduate student mentoring possible. Questions exist to the economics of how growth might most efficiently be achieved. Perhaps a traditional model of simply increasing tenured-track faculty-lines may not provide sufficient return on investment. One proposed alternate is to diversify employment categories to include research faculty and teaching faculty. Teaching faculty would provide lower division teaching support thus freeing tenured faculty time, and self-supported research faculty could serve to enhance graduate student mentoring and support in research. Providing this may speculatively serve to enhance productivity in multiplicative ways rather than the additive way expected from simply adding faculty using the traditional tenured track model.
4. A minor controversy exists within the school regarding electronic distance learning programs, the quality of students engaged in this program, the development of a bimodal population with respect to student quality, and work load equity associated with the distance learning programs. The size of the distance learning program has been relatively large and it appears to be economically important to the university and this

fiscally helps justify the Radiological Health Physics Program. While it is hard to understand the implications of preliminary enrollment data, it may be that this distance learning program is starting to show declines perhaps associated with satiation of demand – but this is speculative. The school must grapple with this question and in the best spirit of self-determination evaluate what they want to do with this distance learning program. The vision is that the program may start to decline in size and it may be moving to a scenario in which non-thesis Master of Health Physics students can be identified as an inferior sub-population. The path forward for the school is to evaluate the importance of the distance learning program to the economics, mission, and intention of the endeavor. This evaluation may lead into either accepting - as intentional- a bimodal population of students in the alumni pool, a cessation of the distance learning program, or a review of programmatic entrance thresholds and performance requirements. The review team did not discuss the best path forward and is, therefore, not able to make recommendations on the most productive scenario for the future. Eventually the school will need to determine what product they want to produce - following this up with definitive answers on how OSU Radiological Health Physics should proceed (or not) with their distance learning program.

Actions to be Taken

1. The School of NSE will continue to pursue new faculty and graduate student office space in buildings in the main part of the engineering campus at Oregon State. The administrative function of NSE (School Head, Graduate Student Liaison, Head Undergraduate Advisor, Public Information Representative, and undergraduate student worker) was relocated to Batcheller Hall in Fall 2016, and 11 new faculty offices will be available for NSE in Fall 2017 in the newly remodeled Merryfield Hall. This will allow the OSU Radiation Center to reclaim over 3000 sq. ft. of prime research space (designed for use of radiation/radioactive materials...) at a small fraction of the cost of new research space. The inconvenience of offices located away from lab space is real; however, the near impossibility of space for growth in the OSU Radiation Center requires that we accept this option to a) add new faculty and staff, b) add new research space, and c) continue to provide an excellent research/educational experience for our graduate students.
2. The School of NSE will work with the College of Engineering's Associate Dean of Graduate Programs to identify approaches to increase the population of RHP students from underrepresented groups. [For example, COE is re-joining the National GEM Consortium and will have a booth at the 2017 SACNAS conference in Salt Lake City. NSE will seek opportunities to participate in COE activities, as appropriate.] Our graduate student population is near capacity, given the number of faculty members in the school, but the proportion of students from underrepresented groups is an area where we can improve.
3. The School of NSE will consider its use of graduate student teaching assistants, instructors, and non-tenured/tenure-track faculty and or staff in the teaching of undergraduate courses in the school of NSE. However, the most significant issue in the School is lack of growth in the tenure-track/tenured faculty ranks. To keep pace with our peer institutions, and to avoid burnout on the part of our highly-productive existing faculty members, we must grow our faculty. Leadership in the School of NSE will be

aggressively pursuing an innovative hiring plan with the goal of growing to 15 tenured/tenure-track faculty in the next four years. The School of NSE will continue to seek ways to leverage qualified professional faculty and instructor hires as appropriate to amplify our capabilities in research and teaching. We plan to employ three Radiation Center staff members in our research (Steve Reese) and undergraduate teaching (Robert Schickler and Todd Keller), and several of our recent NSE research faculty hires (Seth Cadell, Izabella Gutowska, Dan LaBrier, and Guillaume Mignot) have expressed interest in mentoring graduate students, writing proposals, serving on graduate committees and teaching courses. The Graduate Committee will propose at beginning of Fall, 2017 that all graduate students in the School of Nuclear Science and Engineering complete a formal course in ethical and responsible conduct of research (either GRAD 520, or, if desired by the faculty of NSE, a 1-CH NSE seminar course offered by a faculty member in the School).

4. Given that the budget model for E-Campus course tuition remission to the School of NSE has changed, the Graduate Committee will review the status of the online Master of Health Physics degree program, and chart a path for its future. This will be proposed to the NSE faculty for their consideration, and decisions about student quality and enrollment, flexibility in course offerings, and final oral examination format will be made. The goal will be to begin this discussion in Fall, 2017 and have a path forward in place by February 2018.