Expected Outcomes: Acquire appropriate knowledge and skills

A person with a Ph.D. is supposed to have an advanced level of mastery of the concepts of physics, and the ability to do original research

Assessment methods

Method: Written Graduate Doctoral Examination (GDE) score

The written component of the GDE consists of three 4-hour exams, one each in classical and statistical mechanics, electricity and magnetism, and quantum mechanics. A score of approximately 50% on all three examinations is required to demonstrate the appropriate level of mastery of fundamental physics.

Findings:

In the 2011-2012 academic year, two of four students passed all three exams on the first try.

How did you use findings for improvement?

To decide who passes and who doesn’t, the entire faculty meets and discusses the exam and the results. Although not pleased with the scores, the faculty decided that the level of the exams was appropriate, and no major changes were recommended.

Additional comments:

None

Method: Refereed publications

Original research that constitutes a dissertation in physics is often publishable in appropriate refereed journals.

Findings:

Of the eight students who earned a Ph.D during the 2012-2012 academic year, seven have published at least one refereed paper. The average number of refereed papers published per Ph.D. recipient was 2.4

How did you use findings for improvement?

We will remind faculty of the benefits of graduate student involvement in the preparation of refereed publications.

Additional comments:

None