

**UNIVERSITY OF ALASKA FAIRBANKS**  
**Student Learning Outcomes Assessment for PhD graduate students**  
 Department of Physics  
 Adopted 12 December 2014

Expanded Statement of Institutional Purpose	Intended Objectives/Outcomes	Assessment Criteria and Procedures	Implementation (what, when, who)
<p><b>MISSION STATEMENT:</b></p> <p>The Physics and Space Physics Graduate Programs will provide scientists and professionals with the training and insight to understand and explore the physical world, from elementary particles to the structure and origin of the universe.</p> <p><b>GOAL STATEMENT:</b></p> <p>We will maintain a program of high quality, international reputation and produce scientists and professionals capable of solving current problems and anticipating future challenges in Physics and Space Physics.</p>	<p>Upon completion of the program, graduates can function effectively in their area of expertise.</p>	<p>Physics will maintain a strong international reputation for producing well-trained PhD graduates.</p>	<p>Graduates will be surveyed to identify program strengths and weaknesses. These surveys will be used in department program development strategies.</p>
	<p>Students will be capable of independently analyzing a problem, identifying the critical aspects, and devising appropriate methods to resolve the questions that arise.</p>	<p>Thesis will demonstrate the identification of and solution to research problems.</p>	<p>Committee will be surveyed after thesis defense.</p> <p>Students will be surveyed.</p>
	<p>Graduates will be successful in obtaining work, or progressing in their field.</p>	<p>80% who desire employment will be employed one year after graduation.</p>	<p>Graduates will be surveyed.</p>
	<p>Demonstrated original thinking.</p>	<p>A successfully defended thesis. At least one first authored peer-reviewed publication or at least one conference abstract.</p>	<p>PhD-level students will give a professional presentation with an abstract.</p>
	<p>Students will have exposure to the peer-reviewed scientific process, for both publications and proposals.</p>	<p>Graduates should have publishable results upon graduation that could lead to 2-3 publications.</p>	<p>Mentors will lead students in writing process and help in handling the publication production process.</p>