

**Annual Key Assessment Findings and Curricular Improvements
Department of Physics**

**M.S. Program in Physics
Ph.D. Program in Physics
AY 2011-2012**

Key Assessment Findings

M.S. Program

During the academic year 2011-12, 4 students took the M.S. comprehensive examination.

Trait	Level						Mean	SD	Total N
	Exceeding Expectations (3pts)		Meeting Expectations (2pts)		Below Expectations (1pt)				
	N	%	N	%	N	%			
1) Application of concepts to problem solving	0	0%	3	75%	1	25%	1.75	0.50	4
2) Understanding of physics concepts	0	0%	3	75%	1	25%	1.75	0.50	4
3) Organization of written solutions	0	0%	3	75%	1	25%	1.75	0.50	4

Ph.D. Program

During the academic year 2011-12, 4 students took the oral and written components of the PhD comprehensive examinations. For both the oral and written components of the exam, three students scored below expectations and one student met expectations.

Table 1: Rubric for PhD Comprehensive Examination Fall 2011 (Oral component)

Trait	Level						Mean	SD	Total N
	Exceeding Expectations (3pts)		Meeting Expectations (2pts)		Below Expectations (1pt)				
	N	%	N	%	N	%			
1) Knowledge of physics concepts	0	0%	1	25%	3	75%	1.25	0.50	4

2) Application of concepts to problem solving	0	0%	1	25%	3	75%	1.25	0.50	4
3) Oral communication	0	0%	1	25%	3	75%	1.25	0.50	4

Table 2: Rubric for PhD Comprehensive Examination Fall 2011 (Written component)

Trait	Level						Mean	SD	Total N
	Exceeding Expectations (3pts)		Meeting Expectations (2pts)		Below Expectations (1pt)				
	N	%	N	%	N	%			
1) Application of concepts to problem solving	1	25%		0%	3	75%	1.50	1.00	4
2) Understanding of physics concepts	0	0%	1	25%	3	75%	1.25	0.50	4
3) Organization of written solutions	0	0%	1	25%	3	75%	1.25	0.50	4

Curricular Improvements

The physics department has continued making small structural changes to the Ph.D. comprehensive examination in order to permit qualified students to take the examination earlier in their careers, ideally no later than their fifth semester in residence.

The department has finished implementing rubrics in both the Master's and Ph.D. programs for the analysis of comprehensive examination performance.