Academic year 2015-2016
Annual Key Assessment Findings and Curricular Improvements
Department of Physics
Master's Program in Physics
Doctoral Program in Physics

Key Assessment Findings

THE CATHOLIC UNIVERSITY OF AMERICA

Financial Planning, Institutional Research and Assessment

GRADUATE COMPREHENSIVE EXAMINATION RESULTS
SCHOOL OF ARTS AND SCIENCES
DEPARTMENT OF PHYSICS
AY2011-2012 to AY2015-2016

Master's Comprehensive Exam

	Fail		Pass		High Pass		Pass w/Honors		TOTAL
	#	%	#	%	#	%	#	%	
AY2011-2012		0.00%	3	100.00%		0.00%		0.00%	**3**
AY2012-2013		0.00%	1	100.00%		0.00%		0.00%	**1**
AY2013-2014		0.00%		0.00%		0.00%		0.00%	**0**
AY2014-2015		0.00%		0.00%		0.00%		0.00%	**0**
AY2015-2016	1	100.00%	0	0.00%	0	0.00%	0	0.00%	**1**
TOTAL	**1**	**20.00%**	**4**	**80.00%**	**0**	**0.00%**	**0**	**0.00%**	**5**

Doctoral Comprehensive Exam

	Fail		Pass		High Pass		Pass w/Honors		TOTAL
	#	%	#	%	#	%	#	%	
AY2011-2012	3	42.86%	2	28.57%	2	28.57%		0.00%	**7**
AY2012-2013	5	29.41%	10	58.82%	2	11.76%		0.00%	**17**
AY2013-2014	3	25.00%	9	75.00%		0.00%		0.00%	**12**
AY2014-2015		0.00%	7	100.00%		0.00%		0.00%	**7**
AY2015-2016	1	20.00%	4	80.00%		0.00%		0.00%	**5**
TOTAL	**12**	**25.00%**	**32**	**66.67%**	**4**	**8.33%**	**0**	**0.00%**	**48**

Note:

1) Milestone outcomes were included in the categories High Pass and Pass with Honors if these designations were explicitly indicated in the students' milestone record.

2) Category "High Pass" includes both "High Pass" and "Pass with distinction".

3) The count in this table is based on the exam outcomes of all attempts in an academic year.

4) Level of the comps, i.e. Master's and doctoral, is based on the milestone activities; if there is no specification of the level in the record, students' degree level is used to determine the level.

- M.S. Program: During the academic year 2015-2016, one student passed the Master's Comprehensive Examination.

- PhD Program: During the academic year 2016-2016, 5 students took the oral and written components of the PhD comprehensive examination. For both components, 4 students passed.

Table of Results
Student Learning Assessment Rubric
Department of Physics
M.S. in Physics
Rubric for MS Comprehensive Exams (Written Component)

Trait	Exceeding Expectations (3pts)		Meeting Expectations (2pts)		Below Expectations (1pt)		Mean	SD	Total N
	N	%	N	%	N	%			
1) Application of concepts to problem solving	0	0%	1	100%	0	0%	2.00		1
2) Understanding of physics concepts	0	0%	1	100%	0	0%	2.00		1
3) Organization of written solutions	0	0%	1	100%	0	0%	2.00		1

Note: 1) The "N" represents the number of students at each level of performance for each trait.
  2) The "%" represents the percentage of the number of students falling at the level performance
    for each trait against the total number of students.
  3) The mean is the average of all scores across the levels within the trait.
  4) The standard deviation (SD) is the measure of the variability of the data set, indicating
    how "spread out" these data are from the mean value.

Table of Results
Student Learning Assessment Rubric
Department of Physics
Ph.D. in Physics
Rubric for Ph.D. Comprehensive Exams (Oral Component)

Trait	Exceeding Expectations (3pts)		Meeting Expectations (2pts)		Below Expectations (1pt)		Mean	SD	Total N
	N	%	N	%	N	%			
1) Knowledge of physics concepts	0	0%	4	80%	1	20%	1.80	0.45	5
2) Application of concepts to problem solving	0	0%	4	80%	1	20%	1.80	0.45	5
3) Oral communication	0	0%	4	80%	1	20%	1.80	0.45	5

Note: 1) The "N" represents the number of students at each level of performance for each trait.
    2) The "%" represents the percentage of the number of students falling at the level performance
      for each trait against the total number of students.
    3) The mean is the average of all scores across the levels within the trait.
    4) The standard deviation (SD) is the measure of the variability of the data set, indicating
      how "spread out" these data are from the mean value.

Student Learning Assessment Rubric
Department of Physics
Ph.D. in Physics
Rubric for PhD Comprehensive Exams (Written Component)

Trait	Exceeding Expectations (3pts)		Meeting Expectations (2pts)		Below Expectations (1pt)		Mean	SD	Total N
	N	%	N	%	N	%			
1) Application of concepts to problem solving	0	0%	4	80%	1	20%	1.80	0.45	5
2) Understanding of physics concepts	0	0%	4	80%	1	20%	1.80	0.45	5
3) Organization of written solutions	0	0%	4	80%	1	20%	1.80	0.45	5

Note: 1) The "N" represents the number of students at each level of performance for each trait.
     2) The "%" represents the percentage of the number of students falling at the level performance
        for each trait against the total number of students.
     3) The mean is the average of all scores across the levels within the trait.
     4) The standard deviation (SD) is the measure of the variability of the data set, indicating
        how "spread out" these data are from the mean
value.

Curricular Improvements

The Dept. of Physics did not make any further structural changes in the graduate comprehensive examinations during 2015-2016.