

Annual Key Assessment Findings and Curricular Improvements
Department Biology
Master's Program in Biology
Doctoral Program in Biology

Key Assessment Findings

In the five-year period beginning AY11-12, we have had 40 Master's and Doctoral students in Biology take and pass their comprehensive examinations (Table 1) except for two Doctoral students who retook part of their examination and passed it the subsequent academic year. Greater than 89% of our graduate students (Table 2) met or exceeded expectations in the three areas that we assess: curricular content, written presentation, and analysis skills in AY15-16.

Table 1. Graduate Comprehensive Examination Data from AY2011-16

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

Master's Comprehensive Exam

	Fail		Pass		High Pass		Pass w/Honors		TOTAL
	#	%	#	%	#	%	#	%	
AY2011-2012		0.00%	6	100.00%		0.00%		0.00%	6
AY2012-2013		0.00%	2	100.00%		0.00%		0.00%	2
AY2013-2014		0.00%	1	100.00%		0.00%		0.00%	1
AY2014-2015		0.00%	2	100.00%		0.00%		0.00%	2
AY2015-2016		0.00%	2	100.00%		0.00%		0.00%	2
TOTAL	0	0.00%	13	100.00%	0	0.00%	0	0.00%	13

Doctoral Comprehensive Exam

	Fail		Pass		High Pass		Pass w/Honors		TOTAL
	#	%	#	%	#	%	#	%	
AY2011-2012		0.00%	5	100.00%		0.00%		0.00%	5
AY2012-2013		0.00%	3	100.00%		0.00%		0.00%	3
AY2013-2014		0.00%	7	100.00%		0.00%		0.00%	7
AY2014-2015	1	20.00%	4	80.00%		0.00%		0.00%	5
AY2015-2016	1	14.29%	6	85.71%		0.00%		0.00%	7
TOTAL	2	7.41%	25	92.59%	0	0.00%	0	0.00%	27

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.

Table 2. Graduate Comprehensive Examination Rubric Data from AY2015-16

Table of Results (2015-16)
Student Learning Assessment Rubric
Department of Biology
M.S. and PhD in Biology
Rubric for Graduate Comprehensive Exam

Trait	Level						Mean	SD	Total N
	Exceeding Expectations (3pts)		Meeting Expectations (2pts)		Below Expectations (1pt)				
	N	%	N	%	N	%			
1) 1) Knowledge of biological curriculum content	3	33%	5	56%	1	11%	2.22	0.67	9
2) Written presentation of scientific topics	0	0%	9	100%	0	0%	2.00	0.00	9
3) Science analytical skills	2	22%	7	78%	0	0%	2.22	0.44	9

- 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

We have not made any major curricular changes in our graduate program in this academic year.