

Annual Key Assessment Findings and Curricular Improvements
Department of Biology
Undergraduate B.A./B.S. Program in Biology
AY 2009-10

Key Assessment Findings

There were 8 students who took the undergraduate comprehensive examination in 2009-10 (Table 1). Seven of those students passed this key assessment milestone for their B.S. or B.A. degree in Biology. The eighth student was not planning to graduate with the cohort of students and was given the opportunity to redo the comprehensive examination. This student has not yet taken advantage of that opportunity.

Table 1. Undergraduate Comprehensive Examination Data from AY2009-10

	Fail		Pass		High Pass		TOTAL
	#	%	#	%	#	%	
Biology Major	1	12.50%	7	87.50%	0	0.00%	8

Table 2. Student Learning Assessment Rubric of Senior Comprehensive Exams from AY2009-10

Trait	Level						Mean	SD	Total N
	Exceeding Expectations (3pts)		Meeting Expectations (2pts)		Below Expectations (1pt)				
	N	%	N	%	N	%			
1) Proficiency in curricular content and biological concepts	1	13%	6	75%	1	13%	2.00	0.53	8
2) Written presentation of scientific topics	2	25%	5	63%	1	13%	2.13	0.64	8
3) Effective use of peer-reviewed scientific literature	2	25%	5	63%	1	13%	2.13	0.64	8

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.

This was the first year the Biology Department used our recently established assessment rubric for senior comprehensive examinations. All of the students, with one exception, met or exceeded expectations in all categories of the examination. The same student produced work that was below expectations in all of the categories, and this student did not pass the exam nor has the student yet graduated.

Curricular Improvements

The Department of Biology curriculum committee has continued discussions throughout the academic year in order to make a comprehensive set of changes to our major requirements that will be considered by the department faculty in the fall of 2010. Those changes will be reported in the AY2010-2011 report. In the meantime, the curriculum for a new and exciting initiative, a Master's in Biotechnology program, was developed during the spring of 2010. This newly established program will allow students who are successfully completing all of the requirements for a B.S. or B.A. in Biology to earn an M.S. in Biotechnology by taking additional courses during junior and senior years plus one additional year of coursework. The first new course in this program will be offered in the fall of 2010. The course will be open to majors in our undergraduate program.