

FEB 17 2005

**Template  
Degree Program  
Assessment of Student Learning Plan  
Kansas State University**

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- Check the box if your program's student learning outcomes have been modified since November 2003. If so, please email ([apr@ksu.edu](mailto:apr@ksu.edu)) or attach a hard copy to this document.

**A. College, Department, and Date**

College: Agriculture  
Department: Animal Sciences and Industry  
Date: November 9, 2004

**B. Contact Person(s) for the Assessment Plans**

J. Ernest Minton, Professor, Graduate Program Director

**C. Degree Program**

PhD in Animal Science

**D. Assessment of Student Learning Three-Year Plan**

**1. Student Learning Outcome(s)**

1. A thorough command of knowledge in an area of emphasis offered by the Graduate Faculty in the Department of Animal Sciences and Industry.
2. An ability to apply critical scientific thought in the application of hypothesis formation, and the design and execution of experiments.
3. Competency in the collection, analyses and interpretation of data as it relates to the scholarship of their area of emphasis.
4. Competency in oral communication and scholarly writing in the form of a doctoral dissertation.

Special rationale for selecting these learning outcomes (optional):

These outcomes will likely be the most accurate to track.

Relationship to K-State Student Learning Outcomes (insert the program SLOs and check all that apply):

Program SLOs	University-wide SLOs (Undergraduate Programs)					Program SLO is conceptually different from university SLOs
	Knowledge	Critical Thinking	Communication	Diversity	Academic / Professional Integrity	
1.						
2.						
3.						
4.						
5.						

Program SLOs	University-wide SLOs (Graduate Programs)			Program SLO is conceptually different from university SLOs
	Knowledge	Skills	Attitudes and Professional Conduct	
1. Advanced knowledge and understanding.	X		X	SLO is consistent with SLOs adopted by Graduate Council
2. Critical scientific thought, hypothesis formation, and design of experiments	X	X	X	SLO is consistent with SLOs adopted by Graduate Council
3. Competency in the collection, analyses, and interpretation of data	X	X	X	SLO is consistent with SLOs adopted by Graduate Council
4. Competency in oral communication and scholarly writing	X	X	X	SLO is consistent with SLOs adopted by Graduate Council

**2. How will the learning outcomes be assessed? What groups will be included in the assessment?**

SLO 1 (from table in Section D1 above) reflects the effectiveness of the student and the supervisory committee in selecting and completing appropriate supporting coursework and in designing and executing activities that will culminate in the doctoral dissertation. This outcome will be assessed **directly** by tracking the rate of successful completion of the oral defense, and **indirectly** by tracking time from admission to completion, overall retention in the program, graduation rate, and placement at completion.

SLO 2 will be assessed **directly** by tracking the success of doctoral students in the program in the preliminary examination. This exam specifically directs the student to formulate testable hypothesis into a series of experiments in the form of a fundable grant proposal format.

SLO 3 will be assessed **directly** in the form of a product(s) resulting from the dissertation. A minimum of two full length manuscripts will be expected to result from the dissertation. The actual number of publications that result from the dissertation will be documented as a measure of experimental competency.

SLO 4 will be assessed **directly** by tracking participation and outcome of graded oral seminar presentations and oral interaction with the scientific community in the form of oral or poster presentation at professional meetings. Doctoral students are expected to have no fewer than three hours of seminar on their program of study, and to have given no fewer than two oral or poster abstract presentations at professional meetings prior to completion of their degree programs.

**3. When will these outcomes be assessed? When and in what format will the results of the assessment be discussed?**

As detailed below, our department will initiate a content-based database that incorporates outcomes to be assessed. This database will be initiated in January, 2005 and will be populated with students currently in progress in the degree program, as well as with applicants to the degree program. We should be able to summarize these data for calendar years 2005, 2006, and 2007 to share with faculty at first full faculty meetings of spring 2006, 2007, and 2008.

**4. What is the unit's process for using assessment results to improve student learning?**

Our department has initiated a comprehensive data collection process that is designed to track progress and milestones of our graduate students from application to graduation and career placement. We have incorporated outcome assessment fields into this database. The database will be initiated for students currently in the program and will include data for all new applicants beginning in January, 2005. The tentative plan is to summarize these data annually and across the three year assessment horizon. These data will be evaluated by the programs Graduate Activities Committee to identify program trends and identify areas that require attention for improvement. These data will be provided to all graduate faculty in the program for review and recommendation to the department head for addressing areas of concern. Because the data will be provided from a content-based database, they will be searchable by both individual graduate mentor and subdiscipline and therefore should be targetable to the appropriate groups or individuals for action. Thus, by the completion of the three year assessment horizon, these data should help the program prioritize areas of emphasis for the subsequent three year assessment cycle.