Ph.D. Degree

Student Learning Outcome #1: Graduates will demonstrate an advanced degree of understanding and scholarly insight into scientific and technical developments related to their chosen fields of study and the impact of these developments on modern science, industry and society.

Method of Assessment: Students are evaluated on content, organization and delivery of academic-credit and exit seminars (evaluation instrument attached). Students prepare a 1-page abstract of their seminar that is distributed to faculty, staff and graduate students several days in advance of the seminar. Evaluation instruments are distributed to and completed by members of the graduate faculty at the seminar. On average, approximately half of the department’s 15 graduate faculty members are available to attend any given seminar and complete evaluation instruments.

Findings: Two Ph.D. students presented exit seminars (no academic credit), and three Ph.D. students presented academic-credit seminars (ANSC 7950) for which a total of 38 evaluation instruments (range: 5 to 10 per seminar) were completed by departmental graduate faculty members in the current reporting period. Non-weighted, per capita mean scores of 4.0 and 4.3 (5 = highest, 1 = lowest) were recorded in graduate-faculty evaluations of seminar content/organization and presentation techniques, respectively, which may be compared with mean scores of 4.6 and 4.6, respectively, from the previous (2012-2013) reporting period.

How findings were used for improvement: Evaluation scores in 2013-2014 were markedly lower than in 2012-2013. At its 2-day retreat in August 2014, faculty discussed how graduate student performance in academic and exit seminars might be improved. Beginning in 2014-2015, we instituted a new practice in which faculty are excused following the seminar question/answer and general discussion period, and the seminar speaker, his/her major professor(s), all graduate students and the ANSC 7950 instructor of record immediately discuss the presentation and identify areas needing improvement. Faculty evaluation instruments are returned to the graduate student’s major professor, after which it is incumbent upon the major professor to discuss each of the critical elements in the seminar evaluation instruments with the student. An appropriate improvement strategy is prescribed for each student on the basis of specific deficiencies that are identified in evaluation process.

Student Learning Outcome #2: Students will be evaluated on independent technical ability as evidenced by conceptualization and completion of original research (evaluation instrument attached).

Method of Assessment: Students will be evaluated at their dissertation defense on five critical elements described in the attached evaluation instrument. Evaluation instruments are distributed to and completed by the members (typically four) of the student’s advisory committee.
**Findings:** Two students completed their programs and were evaluated by their advisory committees for independent technical ability. Nine evaluation instruments were completed in which the students were rated on each of five critical elements:

(i) Conversational knowledge of the significance of the research, including scientific merit and originality was rated as excellent by 67%, good by 22% and fair by 11% of faculty respondents.

(ii) Ability to conceptualize original research and communicate its relevancy and impact to the discipline and society was rated as excellent by 44%, good by 22% and fair by 33% of faculty respondents.

(iii) Technical skill, including experimental design, laboratory/field methodology and data analysis was rated as excellent by 55%, good by 33% and fair by 11% of faculty respondents.

(iv) Grammar, clarity and style of organization of the dissertation were rated as excellent by 33% and good by 67% of faculty respondents.

(v) General scholarship was rated as excellent by 55%, good by 22% and fair by 22% of faculty respondents.

**How findings were used for improvement:** Evaluation ratings in 2013-2014 were only slightly lower than in 2012-2013. Assessment data are placed into students’ permanent file, discussed with the student in exit interviews with the department head, and utilized as a professional development resource in annual workload planning conferences and performance evaluations of graduate faculty.

**Program Outcome #1:** Graduates will present findings from their original dissertation research at professional meetings, and publish same in refereed journals.

**Method of Assessment:** Annual surveys of programs in the immediately preceding reporting period will be conducted to track citations of abstracts of papers/posters presented at local, regional, national, and/or international scientific meetings; and citations of published papers, or pre-publication status of manuscripts in peer-reviewed journals. Data are provided to the Graduate Program Officer by members of the department’s graduate faculty who supervised programs to completion the previous year.

**Findings:** One student completed her program in the previous (2012-2013) reporting period. She has six published abstracts of presentations at professional society meetings, one referred journal article published, one manuscript accepted for publication with revision, and one manuscript submitted for publication and undergoing editorial review.

**How findings were used for improvement:** No changes are necessary to make at this time. Perhaps more so at this time than at any other time in the past, our department has aggressively encouraged and created more opportunities for professional development of our graduate students such as presentation of research results at scientific meetings. Graduate student participation in such meetings is at an all-time high, and rates of dissertation-research publication in the refereed literature are increasing.
Program Outcome #2: Graduates will be nationally competitive for advanced certification, accreditation and/or placement in industry government or academia as appropriate to their degree and chosen field.

Method of Assessment: Annual surveys will be conducted to track success of the previous year’s graduates seeking advanced professional certification, admission to professional programs, or employment in the private sector, government or academia as appropriate to their degree and chosen field. Data are provided to the Graduate Program Officer by members of the department’s graduate faculty who supervised programs to completion the previous year.

Findings: One student completed her program in the previous (2012-2013) reporting period. She is currently a postdoctoral research associate at University of Georgia, and is actively applying and interviewing for university-level, tenure-track teaching/research positions.

How findings were used for improvement: At its retreat in August 2014, the faculty discussed strategies for creating more opportunities for post-graduation professional development, but none have been finalized and implemented.
**GRADUATE STUDENT SEMINAR EVALUATION FORM**  
(Graduate Faculty Use Only)

Graduate Student_____________________________________________Date_______________
Ph.D.  M.S.   M.Ag.     Title_____________________________________________________

Please rank all items 5 -1; 5 being the highest and 1 being the lowest.

<table>
<thead>
<tr>
<th>Item</th>
<th>Score 5 - 1; or N/A</th>
<th>Comments and Suggestions for Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Content and Organization</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Introduction/Justification/</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Statement of problem</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Objectives stated clearly</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Organization/Followed in logical order</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Explanation of experimental procedures</td>
<td></td>
<td></td>
</tr>
<tr>
<td>and statistical analyses (as appropriate)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Results: Presented in appropriate detail followed by interpretations based on data presented</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Conclusions/Summary</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
7. Overall implications of presented research and future applications in research and/or animal production

8. Academic Rigor

## B. Presentation Techniques

1. Speaking Technique (Relaxed, eye contact, etc.)

2. Vocabulary-Pronunciation/Grammar/Enunciation/Word choice and phraseology

3. Appropriate and well designed slides

4. Response to questions

5. Operated within time limit (30 min)
Ph.D. STUDENT EVALUATION FORM
DEPARTMENT OF ANIMAL SCIENCES

Name of Student:                Date:

Title of Dissertation:

Please evaluate the student with respect to the following critical elements by checking the appropriate response and providing additional comments:

I. Conversational knowledge of the significance of the research problem, including scientific merit and originality of hypothesis(es) tested:
   __ Excellent      __ Good      __ Fair      __ Poor
   Additional comments:

II. Ability to conceptualize original research and communicate its relevancy and impact(s) to the discipline and society
    __ Excellent      __ Good      __ Fair      __ Poor
    Additional comments:

III. Technical skill in use and application of methodology, including experimental design and laboratory and data analysis:
     __ Excellent      __ Good      __ Fair      __ Poor
     Additional comments:
IV. Grammar, clarity and style of organization of the dissertation:

___ Excellent  ___ Good  ___ Fair  ___ Poor

Additional comments:

V. General scholarship:

___ Excellent  ___ Good  ___ Fair  ___ Poor

Additional comments: