

**Program Assessment Report
DBCALFS ANSC MS Program
University of Arkansas
Academic Year 2024-2025**

1. Animal Science Department, B111 AFLS, 575-3745

2. Department Mission:

The Department of Animal Science shall be a leading authority of animal agriculture by means of innovative research, teaching and extension programs for all Arkansans and the world.

- 3. Program Goals:** The Department of Animal Science will 1) perform research from discovery to application that benefits the production efficiency, animal health/well-being, food safety/security, and sustainability of animal agriculture, **2) recruit, educate, and prepare for the future, a new generation of citizens that will provide expertise in food production, animal health/well-being, as well as human health and nutrition,** and 3) provide research-based livestock and forage information through non-formal educational methods for the sustainability and management of agricultural production systems to improve Arkansans quality of life.

4. Student Learning Outcome #1:

Graduate students will demonstrate a basic knowledge of statistics, an in-depth knowledge of their specific thesis research area and a general knowledge of other research in the Department. Areas of emphasis may include animal nutrition, genetics, physiology, muscle foods, parasitology and forages.

A. Assessment Measure 1

- If thesis student -- completion of the thesis and successful defense to the faculty, turning in thesis to graduate school.
- If non-thesis student – completion of oral exam by committee.
- Indirect

Summary of Findings:

- **3 students completed oral exams and graduated with non-thesis degrees.**
- **2 students completed oral exams and a thesis and graduated.**

5. Student Learning Outcome #2

Graduate students will demonstrate problem solving skills.

A. Assessment Measure 2

- During the final oral exam students will be assessed using rubrics by the faculty members serving on their respective graduate committees. Scores on the oral rubric in the 'Overall breadth of knowledge' and 'Quality of response to questions' sections, and scores on the written rubric (if thesis M.S. students) in the 'Overall quality of science', 'Contribution to discipline', and 'Experimental design implementation and interpretation' sections will be combined for an overall score for this learning outcome. Rubrics are included on the final pages of this report.

- Direct
- Major professor is responsible for distributing rubric during defense and collecting the data

Acceptable and Ideal Targets

- The target is that a majority of candidates at least 'Meets Expectations Well' on the rubric. Ideally all candidates will 'Meet Base Expectations'.

Summary of Findings:

- 4 of the 5 students had oral and written (if thesis degree) communication rubrics returned by at least one committee member (a range of 1 to 3 committee members scored each student on each rubric). The average score for the measurements used to assess problem solving was 3.2 (3 is 'Meets Expectations Well') with a range of 2.8 to 4. No student received any marks within the 'Does Not Meet Expectations' category; all other marks were 'Meets Base Expectations' or above.

6. Student Learning Outcome #3

Graduate students will be able to communicate effectively in a) oral and b) written form.

- Oral Communication (rubric at end of report)
 - 4 students had the oral communication rubric returned by at least 1 committee member (a range of 1 to 3 committee members scored each student. The average score for the oral communication rubric was 3.25 with a range of 2.8 to 4.0. No students received marks within the 'Does Not Meet Expectations' category; all other marks were 'Meets Base Expectations' or above. 75% of the students were scored on the overall assessment as Meets Expectations Well or higher by all reviewers. A single student had a 2 reviewers who marked Meets Base Expectations.
- Written Communication (rubric at end of report)
 - 1 student had the written communication rubric returned by 1 committee member. The average score for the written communication rubric was 2.0. There were no marks of 'Does Not Meet Expectations' on this rubric.

Note: For all data, scores for each student (if multiple rubrics were submitted) were averaged; then all students were averaged for the reported scores.

7. Overall Recommendations

- Rubrics for assessing the Student Learning Outcomes #2 and 3 were used by most committees this year. Emphasis must continue to be placed on completing the rubrics at the conclusion of all defenses. And it should be emphasized that **all** committee members are to independently complete the rubrics.

8. Action Plan

- The Department's Administrative Assistant has digital copies of the rubrics. These rubrics were handed to major professors at the start of each defense. Each committee member is supposed to complete the rubric.
- We will continue to attempt to improve the rate of completion and return of these rubrics used for assessment.

- Faculty will continue to mentor M.S. students as they have successfully done in previous years. For these 5 students, 1 is in a College of Veterinary Medicine, 2 are employed in the livestock industry, and 2 continue to look for employment in this field. These 2 students both reported orally that the degree helped them discern where their interests lie and that they benefited from the program.

Attribute for ORAL	Does Not Meet Expectations Provide a short explanation for each attribute that you select in this category (Equivalent to Benchmark =1 on ANSC Undergraduate Rubric)	Meets Base Expectations (Equivalent to Milestone = 2 on ANSC Undergraduate Rubric)	Meets Expectations Well Results BETWEEN a basic meeting of expectations and exceeding expectations (Equivalent to Milestone = 3 on ANSC Undergraduate Rubric)	Exceeds Expectations (Equivalent to Capstone = 4 on ANSC Undergraduate Rubric)
Overall quality of presentation	☐ Poorly organized	☐ Clearly organized	☐ Clearly organized	☐ Well organized (introduction, conclusion, sequenced material in the body, transitions)
	☐ Poor presentation	☐ Clear presentation	☐ Clearer presentation	☐ Professional presentation
	☐ Poor communication skills	☐ Good communication skills	☐ Better communication skills	☐ Excellent communication skills
	☐ Slides and handouts difficult to read	☐ Slides and handouts clear	☐ Slides and handouts good	☐ Slides and handouts outstanding
Overall breadth of knowledge	☐ Presentation unacceptable	☐ Presentation acceptable	☐ Presentation good	☐ Presentation superior
	☐ Presentation reveals critical weakness in depth of knowledge in subject matter	☐ Presentation reveals some depth of knowledge in subject matter	☐ Presentation reveals adequate depth of knowledge in subject matter	☐ Presentation reveals exceptional depth of subject knowledge
	☐ Presentation does not reflect well developed critical thinking skills	☐ Presentation reveals average critical thinking skills	☐ Presentation reveals above average critical thinking skills	☐ Presentation reveals well developed critical thinking skills
	☐ Presentation is narrow in scope	☐ Presentation reveals the draw from knowledge in several disciplines	☐ Presentation reveals the draw from knowledge in several disciplines	☐ Presentation reveals the ability to interconnect and extend knowledge from multiple disciplines
	☐ No application to ANSC	☐ Application to ANSC evident	☐ Application to ANSC evident	☐ Presentation shows clear application to ANSC
Quality of response to questions	☐ Responses are incomplete or required prompting	☐ Responses are complete	☐ Responses are more complete	☐ Responses are eloquent
	☐ Arguments are poorly presented	☐ Arguments are well organized	☐ Arguments are well organized	☐ Arguments are skillfully presented
	☐ Respondent exhibits lack of knowledge in subject area	☐ Respondent exhibits adequate knowledge in subject area	☐ Respondent exhibits good knowledge in subject area	☐ Respondent exhibits superior knowledge in subject area
	☐ Responses do not meet level expected of degree program of graduate (MS or PhD)	☐ Response meets level expected of degree program of graduate (MS or PhD)	☐ Response meets level expected of degree program of graduate (MS or PhD)	☐ Responses exceed level expected of degree program of graduate (MS or PhD)
	☐ Student does not realize the connection of research to ANSC	☐ Student adequately connects research to ANSC	☐ Student adequately connects research to ANSC	☐ Student is able to discuss in depth the connection of thesis research to ANSC
Overall assessment	☐ Does not meet expectations	☐ Meets expectations	☐ Meets expectations	☐ Exceeds Expectations

Confidential comments:

Attribute for WRITTEN	Does Not Meet Expectations Provide a short explanation for each attribute that you select in this category (Equivalent to Benchmark =1 on ANSC Undergraduate Rubric)	Meets Base Expectations (Equivalent to Milestone = 2 on ANSC Undergraduate Rubric)	Meets Expectations Well Results BETWEEN a basic meeting of expectations and exceeding expectations (Equivalent to Milestone = 3 on ANSC Undergraduate Rubric)	Exceeds Expectations (Equivalent to Capstone = 4 on ANSC Undergraduate Rubric)
Overall quality of science	☐ Arguments are incorrect, incoherent, or flawed	☐ Arguments are correct	☐ Arguments are coherent and clear	☐ Arguments are superior
	☐ Objectives are poorly defined	☐ Objectives are clear	☐ Objectives are clear	☐ Objectives are well defined
	☐ Demonstrated rudimentary critical thinking skills	☐ Demonstrates average critical thinking skills	☐ Demonstrates above average critical thinking skills	☐ Exhibits mature, critical thinking skills
	☐ Does not reflect understanding of subject matter and associated literature	☐ Reflects understanding of subject matter and associated literature	☐ Reflects good understanding of subject matter and associated literature	☐ Exhibits mastery of subject matter and associated literature
	☐ Demonstrates poor understanding of theoretical concepts	☐ Demonstrates some understanding of theoretical concepts	☐ Demonstrates understanding of theoretical concepts	☐ Demonstrates mastery of theoretical concepts
	☐ Demonstrates limited originality	☐ Demonstrates originality	☐ Demonstrates good originality	☐ Demonstrates exceptional originality
Contribution to discipline	☐ Displays limited creativity and insight	☐ Displays creativity and insight	☐ Displays good creativity and insight	☐ Displays exceptional creativity and insight
	☐ Limited evidence of discovery	☐ Some evidence of discovery	☐ Good evidence of discovery	☐ Exceptional evidence of discovery
	☐ Limited expansion upon previous research	☐ Builds upon previous research	☐ Extends previous research	☐ Greatly extends previous research
	☐ Limited theoretical or applied significance	☐ Reasonable theoretical or applied significance	☐ Good theoretical or applied significance	☐ Exceptional theoretical or applied significance
Experimental design implementation and interpretation	☐ Limited publication impact	☐ Reasonable publication impact	☐ Good publication impact	☐ Exceptional publication impact
	☐ Duplication of previous work. Design/approach not appropriate	☐ Design/approach moderately appropriate or innovative	☐ Design/approach appropriate	☐ Design/approach appropriate and innovative
	☐ Data interpretation is inappropriate and/or uses incorrect methodology	☐ Data interpretation is appropriate and uses limited number of correct methodology	☐ Data interpretation is appropriate and uses correct methodology	☐ Data interpretation is appropriate and creatively uses correct methodology
	☐ Identifies no weakness in interpretation	☐ Identifies some weaknesses in interpretation	☐ Identifies weaknesses in interpretation	☐ Identifies weaknesses in interpretation
Quality of writing	☐ Demonstrates a lack of ability to articulate a critical response in one's own work or that of other research in the field	☐ Demonstrates a limited ability to articulate a critical response in one's own work or that of other research in the files	☐ Demonstrates ability to articulate a critical response to one's own work or that of other research in the field	☐ Demonstrates an advanced ability to articulate a critical response to one's own work or that of other research in the field
	☐ Writing is weak ☐ Numerous grammatical and spelling errors	☐ Writing is adequate ☐ Some grammatical and spelling errors apparent	☐ Writing is good ☐ Limited grammatical or spelling errors apparent	☐ Writing is publication quality ☐ No grammatical or spelling errors apparent

	☐ Organization is poor ☐ Documentation is poor	☐ Organization is logical ☐ Documentation is adequate	☐ Organization is good ☐ Documentation is good	☐ Organization is excellent ☐ Documentation is excellent
Overall assessment	☐ Does not meet expectations	☐ Meets base expectations	☐ Meets expectations well	☐ Exceeds Expectations
Confidential comments:				