

Annual Academic Assessment Report
Department of Animal Science Undergraduate Program

May 1, 2025

Report annually to the Dean of the college/school the following:

- **Report on General Learning Outcome # 6.1**
- **Results of analysis of assessment of one departmental Student Learning Outcome**
Student Learning Outcome #3:
Students will possess critical thinking skills and objectively make decisions about contemporary issues based upon scientific facts rather than emotion.

General Education Learning Outcome 6.1 Report

As stated on the University of Arkansas Catalogue of Studies General Education webpage:
(<https://catalog.uark.edu/undergraduatecatalog/gened/generaleducation/#goal6outcomestext>)

Goal 6

Gain the ability to synthesize, integrate, and apply knowledge developed throughout the undergraduate years.

Learning Outcome 6.1

Upon reaching this goal, students will be able to reflect upon and explain how they use the skills and abilities embodied in Goals 1 through 5 in completing an integrative project in their major during their junior or senior year.

One purpose of ANSC 49903 is to provide students with an opportunity to apply and integrate knowledge from previous coursework in general education and animal science. This course is a multiple experience/ exercise capstone course and is designed for students to demonstrate mastery of a particular subject within Animal Science. Students will provide evidence of integrated knowledge through a variety of means including the creation of a 1250-word reflective essay, a 150-word research abstract and applying problem solving and critical thinking skills to a culminating project.

Students picked a timely/ pertinent question to research based on their ANSC concentration. They provided an annotated bibliography consisting of recent, relevant journal articles and books, assimilated information obtained and produced an abstract and infographic that shared the results of their research. Students peer-reviewed each other's infographics.

Students in ANSC 49903 spent the semester working on a scaffolded project that culminated in a written paper (minimum word count 1250) and an infographic.

Steps taken in this culminating project were:

- Identify a concept/ information in ANSC that could be beneficial to producers or the general public and present in the form of an educational infographic. Students were instructed to put learned concepts into how information could be used by producers to increase profits, or how information could be used to promote animal welfare or sustainability.
- Students produced references using APA #7 format and annotated bibliographies (recent peer-reviewed journal articles, books) making sure that their infographics were grounded in science.
- Students created an outline, including graphics and pictures, that would be used in their infographic.
- Students created an infographic in CANVA that was geared toward the general population or livestock producers.
- Students created a 150-word abstract.
- Students wrote a reflection paper adhering to the following instructions:
In at least 1,250 words, reflect on how this assignment involved at least three of the following skill sets and abilities (as listed in GELO 6.1):
 1. How this assignment involved your written, oral, and/or multimodal communication abilities
 2. How this assignment involved quantitative literacy (using math or statistical methods, emphasizing the process of formulating, solving, interpreting and applying equations or statistics to solve real-world problems)
 3. How this project incorporated critical thinking and/or ethical reasoning
 4. How this assignment embraced inquiry and action in ANSC **and** in one of the following:
 - Concepts from the fine arts or performing arts
 - Aesthetic, humane, and ethical sensibilities of the humanities
 - Principles of human interactions of individuals, groups, and institutions
 - Through experiment and observation, the basic principles that govern natural phenomena.

Students enrolled in ANSC 49903 met University General Education Outcome 6.1 in the following ways:

- Students researched and submitted an annotated bibliography with at least 5 current journal articles pertaining to a question based on their Animal Science concentration. (meets 6.1a, 6.1c)
- Students critically assessed and articulated current research pertaining to a targeted question based on their Animal Science concentration. This was in the form of a research abstract that integrated information from the assignment above to develop scientifically based solutions to animal-based problems (meets 6.1a, 6.1c, 6.1e).

- Students created a 1250-word paper reflecting on how their general education core classes helped them develop at least 3 of the skills and abilities outlined in Goal 6.

GELO 6.1 scores

A total of 32 students were enrolled in ANSC 49903 in the fall of 2024 and 50 students were enrolled in ANSC 49903 for the spring of 2025.

Course	Number of Seniors	Mean Score	% of students receiving GELO 6.1 score of:				
			4	3	2	1	0
ANSC 49903(F)	32	3.34	68%	28%	3%	0%	0%
ANSC 49903(S)	50	3.70	74%	22%	4%	0%	0%
Total	82	3.68	71%	24%	3%	0%	0%

Links to ANSC 49903 student-produced Infographics for 2024 Fall

<https://padlet.com/Anscdept/24-ansc-inforaphics-dopxrb22znq33ebh> and 2025 Spring

<https://padlet.com/Anscdept/2025-sp-infographics-gzccrasr0pz2v3ru>

Results of analysis of assessment of one departmental Student Learning Outcome

Direct Assessment: Student Learning Outcome #3

Students will possess critical thinking skills and objectively make decisions about contemporary issues based upon scientific facts rather than emotion.

Assessment Measure – Direct

- The **critical thinking value rubric** (scale of 1 to 4, with 1 = Benchmark and 4 = Capstone) developed by The American Association of Colleges and Universities (AAC&U) was used for assessing the critical thinking skills of students and applied to their capstone project in ANSC 49903. Critical thinking was demonstrated by the exploration of research, analysis of text and data before formulating a concept, and presentation of their research-based project in the form of an infographic.

Course	Number of Seniors	Mean Score	% students receiving a score of:			
			4	3	2	1
ANSC 49903*	50	3.44	62%	20%	18%	0%
ANSC 49903**	32	3.46	46%	53%	0%	0%
Total	82	3.45	56%	32%	10%	0%

*Note: *Indicates seniors who graduated in the spring; **Indicates seniors who graduated in the fall*

- **In summary:**
 - The target for the Department was that 70% of graduating seniors would score an average of 3 or above. In 2024/ 2025, 88% of the students assessed with the critical thinking value rubric scored 3 or above, therefore the departmental goal was met.
 - Suggestions include continuing to offer students opportunities to apply critical thinking skills inside and outside of the classroom.

Indirect Assessment – Senior Anonymous Exit Survey

Graduating seniors are given multiple avenues to express their opinions and make recommendations that they feel would help ANSC serve the needs of students. In addition to anonymous surveys, students participate in exit interviews with the Department Head of Animal Science.

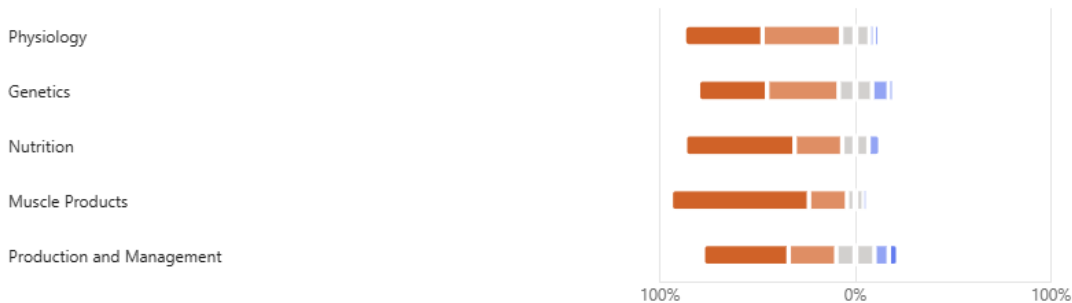
Student Exit Survey

Eighty-two students in the Fall 2024 and Spring 2025 Capstone course participated in an anonymous exit survey. Students were asked to self-assess their competence in five areas before they took departmental ANSC courses and after they completed the courses required for a B.S. in ANSC. Students rated their competence in various content areas from 1-5 (1/ dark brown= not confident; 2/ light brown= somewhat confident; 3/ grey= neutral; 4/ light blue = confident; 5/ dark blue = extremely confident). The five competency areas students self-rated were physiology, genetics, nutrition, muscle products and production management. The results are as follows:

12. Please rate your competence in the areas below BEFORE you started at the U of A. (1=not confident; 5=extremely confident)

[More details](#)

● Option 1 ● Option 2 ● Option 3 ● Option 4 ● Option 5



13. Please rate your competence in the areas below as an ANSC senior (1=not confident at all; 5= extremely confident)

[More details](#)

● Option 1 ● Option 2 ● Option 3 ● Option 4 ● Option 5



Percentage of students confident or extremely confident in ANSC core areas before taking ANSC courses and after completing ANSC content areas:

Subject matter	Confidence before taking ANSC courses	Confidence after completing ANSC courses
Physiology	4.8%	67.1%
Genetics	10.9%	64.6%
Nutrition	19.5%	67.1%
Muscle Products	9.7%	40.7%
Production/ Management	12.2%	82.7%

Additional information gleaned from the anonymous survey:

- 48 students (59%) volunteered while attending classes
- 47 students (51%) participated in clubs and teams
- Most students (84%) worked while enrolled at UA

19. On average, how many hours per week did you work during the school year?

None	13
1-10	14
11-20	31
21-30	17
Above 31	7

