

# **Assessment of Student Learning in the Animal Science- Ag Education Division**

## **2019-2020 Academic Year**

### **Part 1- Animal Science and Ag Education Program Learning Outcome Assessment**

Students majoring in Animal Science or Agricultural Education are expected to meet the following learning outcomes upon completion of their degrees.

1. Students will be able to effectively communicate in oral and written form.
2. Students will be able to gather, assimilate, and process information to reach sound logical conclusions.
3. Students will be able to apply economic principles of accounting, marketing and budgeting to agricultural enterprises.
4. Students will be able to exhibit required knowledge and skills consistent with their chosen field of study. ( Technical Competence)
5. Learning outcomes specific to livestock area options( Livestock Industry Management and Equine Industry Management)
  - a. Students will be knowledgeable in the areas of modern livestock husbandry and management practices.
6. Learning outcomes specific to transfer options
  - a. Students will demonstrate a basic knowledge in the areas of biology, chemistry, mathematics, and oral/written communication along with a basic understanding of agriculture consistent with standards set for baccalaureate degrees.

Assessment of Animal Science and Ag Education program outcomes includes the following tools.

1. Course Competency
  - a. Technical Knowledge is measured in several key courses.
2. Capstone Course/ Project
  - a. Students who are in the Livestock Industry Management or Equine Industry Management Program Areas take the AGR 2983 Capstone course. Students design business plans encompassing details of the operation.
3. Internship Employer Surveys
  - a. The results from these surveys provide feedback on outcome of technical competence from the employer perspective.

## **Part 2-Course Competency Summary for Assessing Animal Science and Ag Education Courses**

Course competency is an important assessment tool for student learning for the following program outcomes:

1. Students will be able to exhibit required knowledge and skills consistent with their chosen field of study. ( Technical Competence)
2. Learning outcomes specific to livestock area options( Livestock Industry Management and Equine Industry Management)
  - a. Students will be knowledgeable in the areas of modern livestock husbandry and management practices.
3. Learning outcomes specific to transfer options
  - b. Students will demonstrate a basic knowledge in the areas of biology, chemistry, mathematics, and oral/written communication along with a basic understanding of agriculture consistent with standards set for baccalaureate degrees.

Livestock Industry	ASI 1253 Nutrition	ASI 1303 Animal Management	ASI 2303 Range Management	ASI 2353 Livestock Breeding	ASI 2383 Large Animal Diseases	ASI 2753 Beef Production
# of Students	51	39	-	21	32	31
% of Course Learning Outcomes Met	87%	97%	-	99%	100%	98%

Students are meeting the outcomes in these courses that provide essential knowledge and skills for them to be productive in the Livestock and Equine Industries. In the Livestock Industry area, there was an increase from last year overall, with one decrease in Nutrition. Multiple faculty changes occurred during this time and Range Management and Nutrition were taught by visiting lecturers in fall 2020. It will be important to improve the mentoring and training of adjuncts and any new faculty in this regard.

Equine Industry Management	ASI 2433 Equine Industry Management I	ASI 2443 Equine Industry Management II	ASI 1442 Equine Practicum I	ASI 2442 Equine Practicum II	ASI 2612 Equine Repro
# of Students	8	8	7	7	11
% of Course Learning Outcomes Met	98%	100%	91%	97%	100%



Some major improvements were made in multiple areas. Choosing to combine with the entrepreneurship course was helpful as was the choice to team teach this course with Doug Smith and Mary Rittenhouse in 2019. Also helpful was the continuation of inviting guest speakers with expertise in areas of most need for the students, to include lawyers and financial advisors within the industry. This evaluation was not made of projects in 2019 and 2020, primarily due to changes in instruction. Mary Rittenhouse and Joanna Hergenreder team taught this course in 2020 and propose that the course be utilized in program assessment moving forward, but that the assessment measure to utilize be re-evaluated to ensure accuracy and efficiency.

#### **Part 4- Internship Evaluations**

Students must complete a 12-week internship as part of their education in the areas of Livestock and Equine Industry Management. The student must keep a journal of daily activities as well as plan a presentation to be completed the following Fall Semester. After completion of the internship, evaluation forms are sent to the employers to ask questions of them concerning the student preparation for the job.

#### **Internship Employer Survey Results for Livestock and Equine Industry Management Students**

Scale: 5 = excellent, 4 = Above average, 3 = Average, 2 = Below Average, 1 = Very Poor

	2015	2015	2016	2016	2017	2017	2018	2018	2019	2019
	Livestock	Equine	Livestock	Equine	Livestock	Equine	Livestock	Equine	Livestock	Equine
Appearance	4	3	3	3	3	3	4.36	4.5	4.428	4.5
Dependability/Supervision	4	4	4	3	4	4	3.818	4	4.143	3.25
Cooperation/Attitude	4	4	4	4	4	4	4.909	4	4.214	3.5
Respect/Personality	3.96	4	4	3	3	3	4.909	4.25	4.5	4
Communication	3.96	4	4	3	3	3	3.909	4.75	3.928	3.75
Attendance/Punctuality	4	4	4	3	4	3	4.363	4.5	4.571	4
Quality of Work/Safety	4	4	4	3	4	4	4.272	4.25	4.357	3.75
Supervisory Ability/Leadership	3	3	3	3	3	3	3.363	3.25	3.714	3.75
Technical Knowledge	3	4	4	4	4	4	3.909	3	3.928	3.25
Overall Employability Rating	4	4	4	3	3	3	4.363	3	4.357	4

We see continued growth in the students especially after the internships. They mature during the internship program which is what we are striving to see, but also see that the students have

added skills from the learning opportunity. The employability of our students remains high, as rated average or above average. Communication skills and supervisory ability/leadership continue to present with deficiencies and, although some of these are to be expected of the age and experience of our students, we plan to incorporate more opportunities and a stronger commitment to improved communication across the curriculum.

**Part 5- Co-Curricular Evaluations**

Co-Curricular (Clubs and Teams) *Spring 2020	ASI 1031/ASI 2031 Rodeo Seminar	ASI 1201 Shooting Sports	ASI 1312/2332 Livestock Judging I & III	ASI 1241/1341 Ranch Horse I & II
# of Students	15	6	11	6
% of Course Learning Outcomes Met	100%	100%	100%	100%

Student outcome statements will be developed for the following clubs to be included in the next division report; Collegiate 4-H, Collegiate FFA, Collegiate Cattlemen, and Women In Ag. This will allow advisor input as well as student input, both present on campus during the school year. The teams have continued to assess student learning and, as indicated above, successfully so. Approximately 45% of the division’s enrolled students were enrolled in one of the teams assessed above, comparing spring 2020 team enrollment to the census data from fall 2019 for the division, indicating strong interest. It will also be beneficial to include a comparison of retention of the division and clubs/teams.

**Conclusion**

Students are meeting the learning outcomes when engaged in the classroom. The failure to have a 100% meeting expectations does occur when students do not attend classes as regularly as possible. We are working to make sure student success is achieved. We reach out to the students to assist in any way possible to have them attend class or speak with us directly. We continue our focus to include more activities for learning in each and every course and employ engagement opportunities throughout.