

The members of the Teaching Advisory Committee in the Department of Animal Sciences & Industry revised the departmental student learning outcomes and developed a new assessment plan in the summer of 2016.

This is the second report generated using the updated assessment plan and it covers the academic year Fall 2017 through Spring 2018.

## I. Student Learning Outcomes

### **SLO 1: Communication**

Demonstrate effective communication skills that clearly convey thought to an audience verbally and in writing.

### **SLO 2: Critical Thinking**

Apply critical thinking skills to solve problems and address issues by gathering, discerning and synthesizing information.

### **SLO 3: Knowledge**

Demonstrate a broad foundation of fundamental knowledge of the science and management aspects of food and companion animal production systems including the disciplines of nutrition, physiology, genetics, animal products and animal behavior.

### **SLO 4: Integrity**

Awareness of the roles ethics and professional integrity play in animal production systems.

### **SLO 5: Diversity**

Demonstrate a recognition of and appreciation for diverse cultures, backgrounds and perspectives in the global animal industry.

## II. Assessment Strategies

Unless indicated differently for each SLO, students were categorized as follows according to the percentage of points they earned in the assessment of each competency.

<b>% Correct</b>	<b>Category</b>
≥ 90	Proficient
80 - 89	Emerging
70 - 79	Developing
≤ 69	Unsatisfactory

Indirect measures for most SLO were collected through a senior exit survey that was required of all graduating seniors in both the fall 2017 and spring 2018. Unless indicated otherwise, student responses are categorized in this report as follows:

<b>Student Response</b>	<b>Category</b>
<i>A great deal or A lot</i>	Proficient
<i>A moderate amount</i>	Emerging
<i>A little</i>	Developing
<i>Not at all</i>	Unsatisfactory

### **SLO 1 Communication**

Students' communication skills were directly assessed using selected assignments (or components of assignments) from ASI 510 (Animal Breeding Principles), 561 (Undergraduate Research in Animals Sciences & Industry), 580 (Animal Sciences & Industry Career Preparation), and 595 (Contemporary Issues in Animal Science and Agriculture). Written and oral communication skills were evaluated through a combination of oral presentations, written abstracts, written letters, and written reports. Written assignments in ASI 580 were assessed using a 6 point scale and are reported herein according to this scale:

<b>Score</b>	<b>Category</b>
5 or 6	Proficient
4	Emerging
3	Developing
0, 1 or 2	Unsatisfactory

Indirect assessments were also made through student responses to selected questions on the senior exit survey.

### **SLO 2 Critical Thinking**

Group projects in ASI 510 (Animal Breeding Principles), specific exam/quiz questions in ASI 533 (Anatomy & Physiology) and ASI 515 (Beef Science), and analyses of controversial issues in ASI 595 (Contemporary Issues in Animal Science & Agriculture) were used to assess critical thinking skills.

Indirect assessments were also made through student responses to selected questions on the senior exit survey.

### **SLO 3 Knowledge**

Students in ASI 515 (Beef Science) and ASI 521 (Horse Science) took online post-tests at the end of the semester. Questions were categorized and assessed separately for each of the following content areas: nutrition, physiology, genetics, and behavior. Only results from students majoring in ASI are included in this report, and, of those, 43% were transfer students.

Indirect assessments were also made through student responses to selected questions on the senior exit survey.

### **SLO 4 Integrity**

Professional integrity was evaluated both directly and indirectly. Students participating in internships (ASI 598 and 599) were directly assessed by their supervisors for dependability, judgement, and maturity.

Students were indirectly assessed for integrity through survey questions in ASI 561 (Undergraduate Research in Animal Sciences & Industry) and the ASI departmental senior exit survey.

Supervisor assessments from ASI 598 and 599, as well as student responses to the statement “*Lapses in academic integrity (i.e., cheating, plagiarism, etc.) were a significant issue in Animal Science courses*” on the senior exit survey are reported as follows:

<b>Criteria</b>	<b>Proficient</b>	<b>Emerging</b>	<b>Developing</b>	<b>Unsatisfactory</b>
Dependability	Strong sense of responsibility	Normally dependable	N/A	Unpredictable, unreliable
Judgement	Good common sense	Usually makes good choices	N/A	Frequently makes poor choices
Maturity	Above average	Average	N/A	Somewhat immature
<i>Survey: Lapses in academic integrity (i.e., cheating, plagiarism, etc.) were a significant issue in Animal Science courses</i>	Strongly disagree	Disagree	Neither agree nor disagree	Agree or strongly agree

**SLO 5 Diversity**

Indirect assessments were also made through student responses to selected questions on the senior exit survey.

## II. Results

### SLO 1 Communication

#### 1. Written communication

Data source	Unsatisfactory	Developing	Emerging	Proficient
ASI 510	9	6	0	18
ASI 561	2	6	26	29
ASI 580	6	5	6	178
ASI 595	4	2	10	6
<b>Total (direct assessment)</b>	<b>21 (7%)</b>	<b>19 (6%)</b>	<b>42 (13%)</b>	<b>231 (74%)</b>
Survey: <i>To what extent did the ASI curriculum prepare you to communicate in <u>writing</u>, including with audiences of varying animal science knowledge or background?</i>				
	4 (2%)	15 (8%)	69 (35%)	108 (55%)

#### 2. Oral communication

Data source	Unsatisfactory	Developing	Emerging	Proficient
ASI 510	0	10	13	10
ASI 561	1	8	21	33
<b>Total (direct assessment)</b>	<b>1 (1%)</b>	<b>18 (19%)</b>	<b>34 (35%)</b>	<b>43 (45%)</b>
Survey: <i>To what extent did the ASI curriculum prepare you to communicate <u>verbally</u>, including with audiences of varying animal science knowledge or background?</i>				
	1 (0.5%)	11 (6%)	68 (35%)	116 (59%)

### SLO 2 Critical Thinking

Data source	Unsatisfactory	Developing	Emerging	Proficient
ASI 510	0	7	13	13
ASI 515	39	0	63	51
ASI 533	88	45	76	33
ASI 595	3	4	13	2
<b>Total (direct assessment)</b>	<b>130 (29%)</b>	<b>56 (12%)</b>	<b>165 (37%)</b>	<b>99 (22%)</b>
Survey: <i>To what extent did the ASI curriculum prepare you to apply <u>critical thinking</u> skills (solving problems and addressing issues by gathering, discerning and synthesizing information)?</i>				
	0	3 (2%)	51 (26%)	142 (72%)

**SLO 3 Knowledge**

<b>Content area</b>	<b>Data source</b>	<b>Unsatisfactory</b>	<b>Developing</b>	<b>Emerging</b>	<b>Proficient</b>
Nutrition	ASI 515	46	26	0	81
	ASI 521	16	7	20	4
	<b>Total</b>	<b>62 (31%)</b>	<b>33 (17%)</b>	<b>20 (10%)</b>	<b>85 (43%)</b>
Physiology	ASI 515	33	21	57	42
	ASI 521	13	9	14	11
	<b>Total</b>	<b>46 (23%)</b>	<b>30 (15%)</b>	<b>71 (36%)</b>	<b>53 (26%)</b>
Genetics	ASI 515	42	0	0	111
	ASI 521	24	0	0	23
	<b>Total</b>	<b>66 (33%)</b>	<b>0</b>	<b>0</b>	<b>134 (67%)</b>
Behavior	ASI 521	7	0	0	40
	<b>Total</b>	<b>7 (15%)</b>	<b>0</b>	<b>0</b>	<b>40 (85%)</b>
<b>Overall</b>	<b>Total (direct assessment)</b>	<b>181 (28%)</b>	<b>63 (10%)</b>	<b>91 (14%)</b>	<b>312 (48%)</b>
<i>Survey: To what extent did the ASI curriculum prepare you in the core competency area of <u>nutrition</u>?</i>		2 (1%)	11 (6%)	52 (26%)	132 (67%)
<i>Survey: To what extent did the ASI curriculum prepare you in the core competency area of <u>physiology</u>?</i>		2 (1%)	10 (5%)	44 (22%)	140 (71%)
<i>Survey: To what extent did the ASI curriculum prepare you in the core competency area of <u>genetics</u>?</i>		12 (6%)	29 (15%)	64 (32%)	92 (47%)
<i>Survey: To what extent did the ASI curriculum prepare you in the core competency area of <u>animal behavior</u>?</i>		6 (3%)	25 (13%)	50 (25%)	116 (59%)
<i>Survey: To what extent did the ASI curriculum prepare you in the core competency area of <u>animal products</u>?</i>		1 (0.5%)	14 (7%)	54 (27%)	128 (65%)
<b>Overall</b>	<b>Total (indirect assessment)</b>	<b>23 (2%)</b>	<b>89 (9%)</b>	<b>264 (27%)</b>	<b>608 (62%)</b>

### SLO 4 Integrity

Data source	Criteria	Unsatisfactory	Developing	Emerging	Proficient
ASI 598/599	Dependability	0	0	1	16
	Judgement	0	0	2	15
	Maturity	0	0	2	15
<b>Total (direct assessment)</b>		<b>0</b>	<b>0</b>	<b>5 (10%)</b>	<b>46 (90%)</b>
ASI 561		0	5	26	8
<i>Survey: To what extent did the ASI curriculum prepare you to be aware of the roles <u>ethics</u> and professional integrity play in animal production systems?</i>		0	4	48	144
<i>Survey: Lapses in academic integrity (i.e., <u>cheating</u>, plagiarism, etc.) were a significant issue in Animal Science courses.</i>		22	40	84	53
<b>Total (indirect assessment)</b>		<b>22 (5%)</b>	<b>49 (11%)</b>	<b>158 (36%)</b>	<b>205 (47%)</b>

### SLO 5 Diversity

Data source	Unsatisfactory	Developing	Emerging	Proficient
<i>Survey: To what extent did the ASI curriculum prepare you to demonstrate a recognition of and appreciation for <u>diverse</u> cultures, backgrounds and perspectives in the global animal industry?</i>	4 (2%)	20 (10%)	54 (28%)	118 (60%)

### **III. Faculty review of the Assessment Results**

This assessment report will be shared with the Department Head and Teaching Coordinator in the department. Future plans include more widespread dissemination of the assessment report among teaching faculty.

### **IV. Actions and Revisions Implemented**

1. Revisions are planned in the collection of data for the assessment report.
  - a. The instructor for ASI 598 and 599 plans to revise the questions asked of internship supervisors to better assess integrity. The data presented reflect the usage of an existing survey and those areas that most closely fit “integrity”.
  - b. Questions will be added to senior exit survey to assess student appreciation of diversity.
2. At this time, no changes are planned for courses or curriculum.