

# Animal Science BS

## Goal 1- Professional Marketplace Skills

### Goal Description:

Students earning a BS in Animal Science will have the skills necessary to seek initial job placement as they begin their professional careers.

**Providing Department:** Animal Science BS

### RELATED ITEMS/ELEMENTS -----

#### RELATED ITEM LEVEL 1

### Goal 1- Objective 1: Job Application and Interview Skills

#### Learning Objective Description:

Students will demonstrate job application and interview skills.

#### RELATED ITEM LEVEL 2

### Goal 1- Objective 1. Indicator 1: Professional Employment Portfolio in AGRI 4120

#### Indicator Description:

This course addresses essential skills necessary for job placement in the work force including resume preparation, interview skills, technical writing skills, and how to seek out employment opportunities. During this assignment students develop job application materials and answer questions relating to actual animal science job openings that have been collated by the faculty. Students compile their assignments into a portfolio, which is reviewed by the animal science faculty using the attached rubric. The portfolio is worth a total of 100 points and is broken down into 20 points for filling out the application, 35 points for the cover letter, and 45 points for their resume. Please see the faculty-developed rubric for further details.

Attached Files

 [Position Application Evaluation Rubric 2019.docx](#)

#### Criterion Description:

Students continue to perform well on this assessment item. We plan to continue to collect data, as professionalism is of critical importance for attaining a job after graduation. The criterion for the upcoming cycle is that at least 80% of students perform at an above average level (4/5) or higher, for each of the components within the three parts of the portfolio. This is the third year that data will be collected.

#### Findings Description:

For this cycle all ANSC students (n=40) scored at least 3 out of 5 on their portfolio.

#### RELATED ITEM LEVEL 3

### Goal 1- Objective 1, Indicator 1: Professional Employment Portfolio in AGRI 4120

#### Action Description:

Students were able to reach and exceed the criteria placed on this cycle. This illustrates that the current coursework is meeting the learning objective. So, moving forward we will reevaluate this goal and learning objective.

#### RELATED ITEM LEVEL 2

### Goal 1: Objective 1. Indicator 2: Phone and Face-to-Face Interviews in AGRI 4120

#### Indicator Description:

All students seeking a degree in Animal Science are required to complete AGRI 4120 as upperclassmen. During the completion of this course all students must complete a phone and face-to-face interview with animal science faculty. Interview skills are assessed by the animal science faculty

using the attached rubric and feedback is provided to the students immediately following completion of each interview. Each interview is worth 100 points. Please see the faculty-developed rubric for further details.

Attached Files

 [Face-to-Face Interview Evaluation Rubric 2019.docx](#)

 [Telephone Interview Evaluation Rubric 2019.docx](#)

### **Criterion Description:**

Our expectation is that 70% of students will achieve at least a 3 out of 5 or greater on all aspects of the rubric. We did not meet this goal for three rubric items during the previous assessment cycle, therefore our goal remains unchanged.

### **Findings Description:**

During this cycle 98% of students scored a 3 or better on the phone interview and 92.5% of students scored a 3 or better on the face-to-face interview.

#### **RELATED ITEM LEVEL 3**

### **Goal 1: Objective 1, Indicator 2: Phone and Face-to-Face interviews in AGRI 4120**

#### **Action Description:**

Students were able to reach and exceed the criteria placed on this cycle. This illustrates that the current coursework is meeting the learning objective. So, moving forward we will reevaluate this goal and learning objective.

#### **RELATED ITEM LEVEL 1**

### **Goal 1- Objective 2: Professional Online Identity**

#### **Learning Objective Description:**

Students will develop a professional online identity.

#### **RELATED ITEM LEVEL 2**

### **Goal 1- Objective 2. Indicator 1: LinkedIn Profiles**

#### **Indicator Description:**

All students seeking a degree in Animal Science are required to complete AGRI 4120 as upperclassmen. During the completion of this course all students must develop a professional online identity using LinkedIn. Profiles are evaluated using a faculty-developed rubric, which is attached to this assessment plan.

Attached Files

 [4120 LinkedIn Profile Rubric 2.docx](#)

### **Criterion Description:**

Our expectation is that 70% of students will achieve at least a 3 out of 5 or greater on all aspects of the rubric. During the 2019-2020 assessment cycle we did not meet this goal on 1 out of 6 rubric components, therefore we will continue to work on meeting this goal.

#### **RELATED ITEM LEVEL 3**

### **Goal 1- Objective 2, Indicator 1: LinkedIn Profiles**

## **Goal 2- Mastery of Key Disciplinary Knowledge**

### **Goal Description:**

Students will exhibit mastery of key disciplinary knowledge in animal science and animal production.

**Providing Department:** Animal Science BS

#### **RELATED ITEMS/ELEMENTS** -----

#### **RELATED ITEM LEVEL 1**

### **Goal 2- Objective 1: Basic Animal Science Knowledge**

#### **Learning Objective Description:**

Students will be able to recall and explain factual and fundamental knowledge relative to the science of domestic livestock.

#### RELATED ITEM LEVEL 2

### Goal 2- Objective 1. Indicator 1: Embedded Test Questions in ANSC 1319

#### Indicator Description:

All students enrolled in the Animal Science program must complete Animal Science (ANSC 1319), which is an introductory animal science course. This course addresses basic concepts of animal nutrition, management, reproduction, and behavior that are relevant to the field of animal science. Embedded test questions, which consist of multiple choice type questions, on the three exams will be used to assess student learning.

#### Criterion Description:

At least 70% of the students will identify the correct answer on embedded test questions focusing on the basic concepts of animal science. The 2019-2020 assessment cycle was the first assessment cycle to assess this knowledge and our goal was met in all categories. We plan to continue collecting data on this assessment cycle as the COVID 19 pandemic disrupted teaching styles during the spring semester.

#### Findings Description:

Performance of students in ANSC 1319 (n=178) shown below:

Topic	% Correct
Growth and Performance	76.5
Nutritional Anatomy	61.9
Nutritional Function	61.4
Reproductive Anatomy	60.3
Reproductive Function	70.9

#### RELATED ITEM LEVEL 3

### Goal 2- Objective 1, Indicator 1: Embedded Test Questions in ANSC 1319

#### Action Description:

Student scores in reproductive anatomy and nutrition were lower than the criterion. However, this course is designed to make sure students are prepared to move forward to the core of the animal science courses. As a result we expect some students who are not prepared to move forward to have some difficulty in some areas. As a result we will reevaluate this goal and learning objective to better meet the needs of the department.

#### RELATED ITEM LEVEL 1

### Goal 2- Objective 2: Advanced Animal Science Knowledge

#### Learning Objective Description:

Students will develop factual and fundamental knowledge relative to the science of domestic livestock. Upon completion of the course, students will be able to apply the gained factual and fundamental knowledge relative to animal science and apply the information regarding animal nutrition and management.

#### RELATED ITEM LEVEL 2

### Goal 2- Objective 2. Indicator 1: Embedded Test Questions in ANSC 3373

#### Indicator Description:

All students enrolled in the Animal Science program must complete Animal Nutrition (ANSC 3373), which is an advanced animal science course. This course addresses key concepts of nutrition and management that are relevant to the field of animal science. Further, this course presents knowledge that is considered necessary for all animal science graduates. Embedded test questions (n= 398) were

developed and administered during the 4 exams offered each semester. Questions are classified as factual, fundamental, and application knowledge. Whereas, factual knowledge is presented in to students for the first time during 3373, fundamental knowledge is knowledge learned in prior coursework, and application knowledge involves the utilization of both factual and fundamental knowledge. Student scores on questions are categorized on a scale of 1 - 5 with 3 "meets expectations," 4 "exceeds expectations," and 5 "far exceeds expectations."

**Criterion Description:**

Although there are fluctuations from year to year and a general trend for improvement, we are still working on achieving the goal of 70% of students scoring a 3 out of 5 in all areas. The addition of 2 pre-requisites (chemistry 1406 and a "c" or better in ANSC 1319) was recent, and there are still students being "grandfathered" in under old requirements in order to not delay graduation. Therefore, we will retain our goal of 70% of students meeting expectations (scoring 3 out of 5) in all areas.

**Findings Description:**

On average, the students (n=86) answered the questions in a way that was 59% accurate. Expectation was 70% accurate response rate. This change in testing style did not align with how the students studied or prepared for the class, even though examples were provide in class and the profess made certain to apply the content in a way that would be similar to the testing style. Further analysis and more data is required before accurate assessments can be formulate on meeting or falling short of expectations.

**RELATED ITEM LEVEL 3**

**Goal 2- Objective 2, Indicator 1: Embedded Test Questions in ANSC 3373**

**Action Description:**

Students still fell short of the 70% criterion. However the style of questions asked has been changed over the last few years starting with issues related to COVID. the inconsistency of this learning objective suggests that it should be reevaluated by faculty to better fit the needs of the department.

**RELATED ITEM LEVEL 2**

**Goal 2: Objective 2. Indicator 2: Identifying Anatomical and Physiological Structures in ANSC 3363**

**Indicator Description:**

All students enrolled in the Animal Science program must complete Anatomy and Physiology of Domestic Animals (ANSC 3363), which is an advanced animal science course. The ability to identify anatomical and physiological structures will be evaluated during a practical exam.

**Criterion Description:**

At least 70% of students will demonstrate the ability to identify each of the major structures presented in class. This item has only been assessed under COVID19 restrictions, therefore we plan to continue data collection through the resumption of normal campus operations, prior to making any changes.

**Findings Description:**

During this last cycle, 84.8% of students (n=183) were able to correctly to identify each of the major structures presented in class.

**RELATED ITEM LEVEL 3**

**Goal 2: Objective 2, Indicator 2: Identifying Anatomical and Physiological Structures in ANSC 3363**

**Action Description:**

We were able to reach the 70% threshold set for this class, soreevaluation of this objective will be necessary in the coming cycle.

**Goal 3- Industry Skills**

**Goal Description:**

Students will demonstrate skills necessary for working in the animal science industries.

**Providing Department:** Animal Science BS

RELATED ITEMS/ELEMENTS -----

RELATED ITEM LEVEL 1

**Goal 3- Objective 1: Animal Handling Skills in Lower Division Labs**

**Learning Objective Description:**

Students will demonstrate skills related to basic animal handling.

RELATED ITEM LEVEL 2

**Goal 3- Objective 1. Indicator 1: Participation in Animal Science Labs**

**Indicator Description:**

All students enrolled in the Animal Science program must complete Animal Science Lab (ANSC 1119), which provides students with exposure to a variety of domestic livestock. Each week of the semester presents a new procedure, including, but not limited to, grooming horses, quality grading eggs, administering vaccines to cattle, and trimming goat hooves. Students are also introduced to basic animal handling procedures. Laboratory instructors record both attendance and active participation of students for each lab.

**Criterion Description:**

All (100%) students will actively engage in 2 or more animal handling experiences during the course of 1119. Active engagement means that they participated in handling an animal or practiced a procedure after watching a demonstration. The level of participation in the activity depends on the nature of the lab. We did not meet our goal during the previous assessment cycle, therefore this goal remains unchanged.

**Findings Description:**

During the previous cycle 97% of students engaged in 2 or more animal handling experiences during ANSC 1119.

RELATED ITEM LEVEL 3

**Goal 3-Objective 1. Indicator 1: Participation in Animal Science Labs**

**Action Description:**

While 97% of students was short of the 100% criterion, the students who did not participate in animal handling experiences also did not participate in or attend any labs. So of the students that attended we were able to reach 100% participation in at least 2 animal handling experiences. So this learning objective will be reevaluated for the coming cycle.

RELATED ITEM LEVEL 1

**Goal 3: Objective 2- Advanced Animal Handling and Production Skills**

**Learning Objective Description:**

Students will demonstrate mastery of advanced animal handling and production skills that are necessary for working in the animal science industries.

RELATED ITEM LEVEL 2

**Goal 3: Objective 2. Indicator 1- Ration Formulation in ANSC 4394**

**Indicator Description:**

All students enrolled in the Animal Science program must complete Animal Feeds and Feeding (ANSC 4394), which is an advanced animal science course. This course applies knowledge from earlier animal science courses and requires students to develop diets for production livestock. Students will develop an industry standard 2-ingredient diet during an exam.

**Criterion Description:**

At least 70% of students will demonstrate the ability to correctly balance a 2-ingredient diet. During the previous assessment cycle, this goal was met, however the course was disrupted by the COVID19 pandemic, and therefore we plan to continue to collect data until we resume normal campus operations.

**Findings Description:**

During this cycle 76.3% of students were able to correctly balance a 2-ingredient diet. It should be noted that during the spring and fall 68.5% of students were able to correctly balance a 2-ingredient diet, while during the summer mini 92% of students were able to correctly balance a 2-ingredient diet.

**RELATED ITEM LEVEL 3**

**Goal 3: Objective 2. Indicator 1- Ration Formulation in ANSC 4394**

**Action Description:**

While during this cycle 76.3% of students were able to correctly balance a 2-ingredient diet. The disparity between the spring and fall (68.5%) and summer mini (92%) make further investigation of how this material is taught of interest to the faculty.

## **Update to Previous Cycle's Plan for Continuous Improvement**

### **Previous Cycle's Plan For Continuous Improvement (Do Not Modify):**

#### **Closing Summary**

##### **Goal 1:**

Firstly, we plan to continually monitor student progress on the current indicator (professional employment portfolio), in order to ensure that students continue to perform well.

Secondly, our evaluation of interview skills revealed that students performed below expectations in both interviews (face to face and telephone interviews). This may be due to these students having approximately 2 years of online courses due to COVID as these scores are significantly lower than previous years. Further collection of data is needed before any alterations are made.

For our second learning objective to Goal 1, the creation of a professional LinkedIn identity, students continued to perform well on most aspects of the rubric with a few scores just below our threshold. We plan to continue to collect data on this assessment item with no major changes.

##### **Goal 2:**

We continue to monitor achievement on embedded test questions in 3373, but due to the new structure these need will need to be evaluated differently than previous data. We plan to continue to monitor the content of ANSC 1319 as scores have been inconsistent from year to year and this course provides the foundation of factual and foundational knowledge.

Student performance on embedded test questions in ANSC 1319 did not meet our target goal in all areas. We plan to continue to review the content of the course as an ANSC faculty group to ensure that content is consistent across sections and up to date with current knowledge.

##### **Goal 3:**

We developed a new goal of demonstrating skills and being involved in experiential learning. We were able to collect some of the data on ANSC 1119 lab participation during the previous cycle, but plan to collect in the upcoming cycle, as we continue to work towards resuming normal operations.

Student performance in ANSC 4394 fell just shy of the learning objectives. However, this assessment data has never been collected under normal teaching methods in the past, so our goal is to continue data collection as campus resumes normal operation.

### **Update of Progress to the Previous Cycle's PCI:**

#### Goal 1:

Firstly, we plan to continually monitor student progress on the current indicator (professional employment portfolio), in order to ensure that students continue to perform well.

Secondly, our evaluation of interview skills revealed that students performed below expectations in both interviews (face to face and telephone interviews). This may be due to these students having approximately 2 years of online courses due to COVID as these scores are significantly lower than previous years. Further collection of data is needed before any alterations are made.

For our second learning objective to Goal 1, the creation of a professional LinkedIn identity, students continued to perform well on most aspects of the rubric with a few scores just below our threshold. We plan to continue to collect data on this assessment item with no major changes.

#### Goal 2:

We continue to monitor achievement on embedded test questions in 3373, but due to the new structure these need will need to be evaluated differently than previous data. We plan to continue to monitor the content of ANSC 1319 as scores have been inconsistent from year to year and this course provides the foundation of factual and foundational knowledge.

Student performance on embedded test questions in ANSC 1319 did not meet our target goal in all areas. We plan to continue to review the content of the course as an ANSC faculty group to ensure that content is consistent across sections and up to date with current knowledge.

#### Goal 3:

We developed a new goal of demonstrating skills and being involved in experiential learning. We were able to collect some of the data on ANSC 1119 lab participation during the previous cycle, but plan to collect in the upcoming cycle, as we continue to work towards resuming normal operations.

Student performance in ANSC 4394 fell just shy of the learning objectives. However, this assessment data has never been collected under normal teaching methods in the past, so our goal is to continue data collection as campus resumes normal operation.

## **New Plan for Continuous Improvement**

#### **Closing Summary:**

After reviewing the specific Goals/Objectives/Indicators of this program, the faculty in agriculture have determined that these items do not wholly reflect the needs and goals of our current students. As a result, we will reevaluate all Goals/Objectives/Indicators to better match the needs of our program and the students who are part of it. It is expected that this will require a deep look at what is considered success in this area and will likely cause significant change to the Goals/Objectives/Indicators for the coming academic year.