UNIT REPORT
Animal Science BS - Assessment
Plan Summary

# **Animal Science BS**

# 1-Develop Professional Marketplace Skills

# **Goal Description:**

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

RELATED ITEMS/ELEMENTS -----

**RELATED ITEM LEVEL 1** 

### 1-Development of Professional Marketplace Skills

# **Learning Objective Description:**

Students completing the BS in Animal Science will demonstrate skills necessary to compete in the professional marketplace.

**RELATED ITEM LEVEL 2** 

### 1-AGRI 4120- Professional Employment Portfolio

#### **Indicator Description:**

All students seeking a degree in Animal Science are required to complete AGRI 4120 in their senior year. The course addresses essential skills necessary for job placement in the work force - resume preparation, interview skills, technical writing skills and employment opportunities. Faculty will review student assignments compiled into a portfolio and assess student performance using a faculty-developed rubric.

Attached Files

# AGRI 4120 Portfolio Rubric Matrix

### **Criterion Description:**

Faculty evaluations will indicate that at least 70% of the Animal Science students enrolled in AGRI 4120 will perform at an acceptable level and score a 3 (meets expectations) or higher on a scale of 1-5.

# **Findings Description:**

The instructor of the course chose to report results based on an average score, rather than the proportion of students achieving a 3 or greater on the portfolio this year. We will likely return to the proportion measurement in future assessments.

On average, Animal Science students (n=28) scored 4.38/5.0 ("exceeding expectations") on the standardized rubric. The portfolio included a cover letter, resume, reference page, letters of recommendation and an employment application. Generally, Animal Science students performed comparably to previous semesters. Though ANSC students performed well, there is always room for improvement.

# Strengths:

- Resumes were of good quality and well organized
- Cover letters and attention to proper grammar, etc. were largely good

# Weaknesses:

• Alignment between reference page and letters of reference needs to be reinforced

RELATED ITEM LEVEL 3

# 1-AGRI 4120- Professional Employment Portfolio

# **Action Description:**

Students are exceeding expectation, but there is room for improvement. Recommendations include to 1) pay more attention to stressing the importance of "Alignment" among items in the portfolio and 2) stressing the importance of selecting references will be added to course expectations in the future.

# 2-Knowledge of Key Disciplinary Concepts and Skills

# **Goal Description:**

Students will develop knowledge and understanding of key concepts relevant to Animal Science and animal production.

RELATED ITEMS/ELEMENTS -----

RELATED ITEM LEVEL 1

**2-Development of Student Knowledge in Animal Science Learning Objective Description:** 

Students will develop factual and fundamental knowledge relative to the science of farm animals. 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** 

# 2-ANSC 3373- Advanced Animal Science Knowledge

### **Indicator Description:**

All students enrolled in the Animal Science program must complete an advanced animal science course. The course for assessment (ANSC 3373) addresses key concepts relevant to nutrition and management relative to the field of animal science and knowledge expected for animal science graduates. During the fall and spring semesters, 398 relative questions were developed and were apart of the 4 exams offered each semester. Questions were classified as factual knowledge, fundamental knowledge and application of both factual and fundamental knowledge. All students were assessed for each category of questions across all exams. Student scores (Fall: 75; Spring: 78) were then categorized on a scale of 1 - 5 with 3 "meets expectations," 4 "exceeds expectations," and 5 "far exceeds expectations."

#### **Criterion Description:**

There will be a general consensus among Animal Science Faculty members that at least 70% of the students enrolled in the advanced course will perform at an acceptable level with a score of 3 (meets expectations) or higher, in all three categories (factual, fundamental and application). Weaknesses to be observed: application of knowledge.

# **Findings Description:**

Though 70.76% of the students in the class scored 3 or higher on the three categories of embedded questions which met the faculty's goal, this is lower than the previous year. Students scored the highest on factual knowledge for the gastrointestinal tract and carbohydrate exams; yet could not apply the information. Whereas, factual knowledge scores from the water/protein and lipid exams were the lowest. Students could apply their water/protein knowledge as indicated by higher scores but scored highest on fundamental knowledge questions when questioned about lipids. More enriched lectures with practical scenarios will continue to be embedded in the lectures to strengthen the application knowledge and establish a better balance between factual, fundamental and application of knowledge.

**RELATED ITEM LEVEL 3** 

### 2- Student Knowledge in Animal Science

### **Action Description:**

Though 70.76% of the students in the class scored 3 or higher on the three categories of embedded questions which met the faculty's goal, this is lower than the previous year. Students scored the highest on factual knowledge for the gastrointestinal tract and carbohydrate exams; yet could not apply the information. Whereas, factual knowledge scores from the water/protein and lipid exams were the lowest. Students could apply their water/protein knowledge as indicated by higher scores but scored highest on fundamental knowledge questions when questioned about lipids. More enriched lectures with practical scenarios will continue to be embedded in the lectures to strengthen the application knowledge and establish a better balance between factual, fundamental and application of knowledge.

# Update to Previous Cycle's Plan for Continuous Improvement

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

Students are exceeding expectations based on the criterion description. This is a positive outcome. Based on these findings, we will continue monitoring student performance on an annual basis. We must be diligent in continuous assessment of this learning objective to ensure that our students are prepared to enter the marketplace. We may consider moving the criterion description standard to 70% of Animal Science students enrolled in the course scoring a 4 or higher, rather than a 3 or higher, but we believe it is too early to make this change at this point in time.

Though 76% of the students in the class scored 3 or higher on the three categories of embedded questions in the common animal science course, there is room for improvement. Students scored the highest on factual knowledge of the gastrointestinal tract, but failed to translate this knowledge into application at the level expected. More supplemental information and enriched lectures with practical scenarios will be embedded to the lectures to enrich the application of factual and fundamental knowledge of GI tract topics. Application of information of carbohydrates was equally low, faculty will spend more time on metabolism how it is affected by the diet.

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

Students have demonstrated the ability to memorize factual knowledge and they have exhibited an acceptable level of fundamental animal science content; however, their ability to apply the information to a higher level of expectations for an advanced course the students are less successful. Faculty in the animal sciences will continue to strive to bridge the students ability to apply information from their core animal sciences into practical scenarios. This will be achieved by discussion, homework, and applicable scenarios across the animal science curriculum. Likewise, faculty will review the application of knowledge from ANSC 3373 into ANSC 4394 (Animal Feeds and Feeding).

# **Plan for Continuous Improvement**

# **Closing Summary:**

- 1. <u>Develop Professional Marketplace Skills</u>: It is imperative that we continue to be diligent in assessment of the learning objective, "Development of Marketplace Skills" to ensure that our students are prepared to enter their career fields. Though students generally exceeded expectations, we will consider adjusting the overall average expectation and/or the percentage exceeding "meet expectations" in future semesters.
- 2. <u>ANSC Content Knowledge</u>: Students are exceeding expectations (minimally) based on the criterion description. Based on these findings, we will continue monitoring student performance on an annual basis. We must be diligent in continuous assessment of this learning objective to ensure that our students are prepared to enter the marketplace with the ability to not only have a knowledge base but be able to apply the knowledge in