

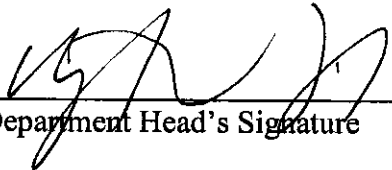
COVER SHEET FOR REVISED ASSESSMENT PLANS

Directions: Please complete a separate cover sheet for each degree program (e.g., Associates – Doctorate). Feel free to make copies of this sheet if needed. Those graduate programs with an integrated master's and doctoral program may submit one cover sheet. The department head and respective dean are to sign before the plans are submitted to the Provost.

Department/Unit: Grain Science and Industry
Title and Level of Academic Program: Feed Science and Management

When submitting an Assessment Plan, please check and indicate when the faculty endorsed the plan.

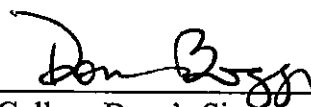
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|--|--|
| <input checked="" type="checkbox"/> Faculty have met, reviewed, and endorsed the Assessment Plans being submitted for this degree program. | Date of Endorsement: <u>Aug. 23, 2005</u> |
|--|--|



Department Head's Signature

08/24/05

Date



College Dean's Signature
(Required for Graduate Degree Programs)

8-29-05

Date

Dean of the Graduate School's Signature
(Required for Graduate Degree Programs)

Date

**Assessment Plans for Student Learning Objectives
 B.S Degree in Feed Science and Management
 Department of Grain Science and Industry
 Kansas State University**

A. College, Department, and Date

College: Agriculture
 Department: Grain Science and Industry
 Date: August 15, 2005

B. Contact Person for the Assessment Plan

Fred Fairchild, Professor

C. Degree Program

B.S in Feed Science and Management

D. Assessment plans for the Student Learning Outcomes that will be addressed in the next Three Years

1. Student Learning Outcomes

Knowledge - The ability to apply the basic principles of mathematics, physics, chemistry, ingredient formulation and feed processing technology to make appropriate feeds for various animal species.

Critical Thinking – The ability to analyze process and production requirements to manufacture animal feeds with proper selection and application of equipment types and capacities required to make specific types of feeds.

| Program SLOs | University-wide SLOs (Undergraduate Programs) | | | | | Program SLO is conceptually different from university SLOs |
|--------------|---|-------------------|---------------|-----------|----------------------------------|--|
| | Knowledge | Critical Thinking | Communication | Diversity | Academic/ Professional Integrity | |
| 1. | X | | | | | |
| 2. | | X | | | | |
| 3. | | | | | | |
| 4. | | | | | | |
| 5. | | | | | | |

2. How will Learning Outcomes be assessed? What groups will be included in assessment?

| Program SLOs | Measures | | | Who will be assessed? |
|---|--|--|----------|--------------------------------|
| | Direct | Indirect | Not Sure | |
| Knowledge - The ability to apply the basic principles of mathematics, physics, chemistry, ingredient formulation and feed processing technology to make appropriate feeds for various animal species. | Selected questions from 1 unit exam and final exam in GRSC 510 FEED TECHNOLOGY I | | | Students in FSM Degree Program |
| | Selected questions in 2 Lab reports in GRSC 510 FEED TECHNOLOGY I | | | Students in FSM Degree Program |
| | Internship experience report in GRSC 591 COMMERCIAL FEED/FOOD MANUFACTURING INTERNSHIP | Supervisor's written evaluation of intern's knowledge and skills during internship. | | Students in FSM Degree Program |
| | | Senior Exit Interviews, in which students will be asked to rate how well they have achieved this outcome | | Students in FSM Degree Program |

| Program SLOs | Measures | | | Who will be assessed? |
|--|---|--|----------|--------------------------------|
| | Direct | Indirect | Not Sure | |
| Critical Thinking – The ability to analyze process and production requirements to manufacture animal feeds with proper selection and application of equipment types and capacities required to make specific types of feeds. | Selected questions from 1 unit exam and final exam in GRSC 750 FEED TECHNOLOGY II | | | Students in FSM Degree Program |
| | Selected questions in 2 Lab reports in GRSC 750 FEED TECHNOLOGY II | | | Students in FSM Degree Program |
| | Completion of processing plant design in GRSC 655 CEREAL FOOD PLANT DESIGN AND CONSTRUCTION | | | Students in FSM Degree Program |
| | | Senior Exit Interviews, in which students will be asked to rate how well they have achieved this outcome | | Students in FSM Degree Program |

3. When will these outcomes be assessed? When and in what format will the results of the assessment be discussed.

| Learning Outcomes | Timetable to Assess Learning Outcomes | | | Baseline created? |
|--|--|--|--|--|
| | Spring 2006 | Spring 2007 | Spring 2008 | |
| Knowledge - the ability to apply the basic principles of mathematics, physics, chemistry, ingredient formulation and feed processing technology to make appropriate feeds for various animal species. | Selected questions from 1 unit exam and final exam, and 2 lab reports in GRSC 510 FEED TECHNOLOGY I | Selected questions from 1 unit exam and final exam, and 2 lab reports in GRSC 510 FEED TECHNOLOGY | Selected questions from 1 unit exam and final exam, and 2 lab reports in GRSC 510 FEED TECHNOLOGY | 3-Year baseline data created by Fall 2008 |
| | Fall 2005 | Fall 2006 | Fall 2007 | 3-year baseline data created by Fall 2008 to evaluate students' preparedness for internship. |
| | Internship Experience report in GRSC 591 and supervisor's evaluation | Internship Experience report in GRSC 591 and supervisor's evaluation | Internship Experience report in GRSC 591 and supervisor's evaluation | |
| | During Senior Exit Interviews, students will be asked to rate how well they have achieved this outcome | During Senior Exit Interviews, students will be asked to rate how well they have achieved this outcome | During Senior Exit Interviews, students will be asked to rate how well they have achieved this outcome | Qualitative base line data achieved by Fall of 2008 |

| Learning Outcomes | Timetable to Assess Learning Outcomes | | | Baseline created? |
|--|--|--|--|--|
| | Fall 2005 | Fall 2006 | Fall 2007 | |
| Critical Thinking – The ability to analyze process and production requirements to manufacture animal feeds with proper selection and application of equipment types and capacities required to make specific types of feeds. | Selected questions from 1 unit exam and final exam, and 2 lab reports in GRSC 750 FEED TECHNOLOGY II | Selected questions from 1 unit exam and final exam, and 2 lab reports in GRSC 750 FEED TECHNOLOGY II | Selected questions from 1 unit exam and final exam, and 2 lab reports in GRSC 750 FEED TECHNOLOGY II | 3-Year baseline data created by Fall 2008 |
| | Completion of processing plant design project in GRSC 655 CEREAL FOOD PLANT DESIGN AND CONSTRUCTION | Completion of processing plant design project in GRSC 655 CEREAL FOOD PLANT DESIGN AND CONSTRUCTION | Completion of processing plant design project in GRSC 655 CEREAL FOOD PLANT DESIGN AND CONSTRUCTION | 3-Year review by Fall 2008 of successful design project completion |
| | During Senior Exit Interviews, students will be asked to rate how well they have achieved this outcome | During Senior Exit Interviews, students will be asked to rate how well they have achieved this outcome | During Senior Exit Interviews, students will be asked to rate how well they have achieved this outcome | Qualitative base line data achieved by Fall of 2008 |

4. What is the unit's plan for improving students' learning?

A course and curriculum committee composed of faculty and student representatives from each departmental major will meet each year in September to review the data from the assessment evaluations collected. Based on the review, the committee will suggest changes to the curriculum, the assessment process and/or SLO's. These suggestions will be presented to teaching faculty involved in instruction of key courses for course revision. Where baselines are established, future assessment will be compared to previous baselines to determine ongoing improvement in learning of students. The assessment data will be presented to the department's industry advisory committees in November of each year.