## AGENDA Faculty Senate Academic Affairs April 1, 2008, 3:30 p.m. K-State Student Union, Room 204

- 1. Call to Order
- 2. Approve March 18, 2008 minutes (from electronic agenda)
- 3. Course and Curriculum Changes
  - A. Undergraduate Education
    - 1. Approve the following course and curriculum changes as approved by the College of Human Ecology on March 10, 2008:

#### **COURSE CHANGES**

Department of Human Nutrition Changes to: HN 450 Nutritional Assessment

## Department of Hotel, Restaurant, Institution Management and Dietetics Change prefix from HRIMD to HMD for the following course numbers:

Add: HRIMD 426 Financial Management in Dietetics

## **CURRICULUM CHANGES**

Department of Hotel, Restaurant, Institution Management and Dietetics

Changes to the B.S. in Dietetics (Coordinated Program and Didactic Program):

• Remove HN 630 and HRIMD 422 from Professional Studies. Add HN 631, HN 632, and HRIMD 426. Total hours for graduation will not change. See pages 4-7 of white sheets for more detail.

Name change to Department From: Department of Hotel, Restaurant, Institution Management and Dietetics (HRIMD) To: Department of <u>Hospitality</u> Management and Dietetics (<u>HMD</u>) See rationale on page 8 of white sheets.

2. Approve the following course and curriculum changes as approved by the College of Agriculture on March 13, 2008:

## **COURSE CHANGES**

Department of Agricultural Communication and Journalism Changes to: AGCOM 110 Introduction to Agricultural Communications († 2)

Add: AGCOM 435 Documentary Production AGCOM 590 New Media Technology

Department of Agricultural Education

Add: AGED 500 Methods of Teaching Agriculture in the Secondary and Middle Schools AGED 520 Block II Lab: Content Area Methods and Field Experience

Changes to course prefixes: EDSEC/GENAG AGED 260 Ag Construction EDSEC/GENAG AGED 262 Ag Structures EDSEC/GENAG AGED 264 Ag Power EDSEC 300 AGED Introduction to Agricultural Education EDSEC 400 AGED Leadership & Professional Development in Agricultural Education EDSEC 503 AGED Teaching Adult Classes in Agriculture EDSEC 505 AGED Field Experience in Agricultural Education

Rationale: Agricultural Education is administratively moving from the Department of Secondary Education in the College of Education to the Department of Communications in the College of Agriculture. The above courses are all part of the current agricultural education programs at the undergraduate or graduate level. No new courses are being created and this change is simply a prefix change to reflect the new administrative structure. The College of Education and College of Agriculture support this change.

Department of Animal Sciences and Industry

| Proposed Pre-Requisite Requirements:                                                                         |                                                                                                                              |
|--------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| FROM:                                                                                                        | TO:                                                                                                                          |
| Course Current Requirements                                                                                  | Proposed Requirements                                                                                                        |
| ASI 315 Pr.: ASI 102 and ASI 105 or Instructor consent                                                       | Pr.:ASI 105 Rec. Pr.:ASI 102 or Instructor consent                                                                           |
| ASI 350 Pr.:BIOL 198                                                                                         | Rec. Pr.:BIOL 198 or a course in Chemistry                                                                                   |
| ASI 385 Pr.:ASI 102                                                                                          | <u>Rec.</u> Pr.:ASI 102                                                                                                      |
| ASI 396 Pr.: ASI 102 and ASI 106                                                                             | <u>Rec.</u> Pr.:ASI 102 and ASI 106                                                                                          |
| ASI 445 Pr.:ASI 345                                                                                          | <u>Rec.</u> Pr.:ASI 345                                                                                                      |
| ASI 490 Pr.:Junior Standing                                                                                  | Rec. Pr.: Junior Standing                                                                                                    |
| ASI 385 PT.:ASI 102<br>ASI 396 Pr.:ASI 102 and ASI 106<br>ASI 445 Pr.:ASI 345<br>ASI 490 Pr.:Junior Standing | <u>Rec.</u> Pr.:ASI 102<br><u>Rec.</u> Pr.:ASI 102 and ASI 106<br><u>Rec.</u> Pr.:ASI 345<br><u>Rec.</u> Pr.:Junior Standing |

ASI 535 Pr.:Senior Standing FDSCI 725 Pr.:FDSCI 501 Rec. Pr.:Senior Standing Rec. Pr.:FDSCI 501

RATIONALE: For these courses the listed prerequisites are only recommended by the assigned faculty teaching the courses. Although faculty prefer incoming students have these courses they will allow students to enroll without them.

Changes to: ASI 510 Animal Breeding Principles

Department of Entomology Add: ENTOM 583 Survey of Horticultural Ornamental and Food Crop Pests

Department of Horticulture, Forestry and Recreation Resources Changes to: HORT 583 Survey of Horticultural Ornamental and Food Crop Pests (cross list with Entomology)

Department of Plant Pathology Changes to: PLPTH 583 Survey of Horticultural Ornamental and Food Crop Pests (cross list with Entomology)

## **CURRICULUM CHANGES**

## (Attachment 1)

Department of Agricultural Communications and Journalism Changes to the Agriculture and Environmental Options: Remove GENAG 101 from General Requirements. Change AGCOM 110 credit hours from 1 to 2 under Agriculture/NR requirements. See rationale on page 11 of white sheets.

*Department of Agricultural Education* Change Agricultural Education curricula to reflect course prefix changes. See page 14 of white sheets.

Department of Animal Sciences and Industry Add: Undergraduate Meat Science Certificate (Attachment 1)

Department of Grain Science and Industry

Add two options to the existing Bachelor of Science degree in Feed Science and Management. Total hours for graduation will change from 126 to 124:

1. Feed Production Option

2. Biofuels Production Option

See pages 20-24 of white sheets for curriculum outlines.

Rationale: There is a great need for educated management and leaders in the biofuels industry. No other university offers an option for this management training. The Feed Science and Management degree already prepares students for careers in the feed, pet food and related grain processing industries, but does not offer a separate option in the biofuels. With the addition of certain current classes as a requirement, the Feed Science and Management degree program can offer a separate option in Biofuels Production. Thus, the Feed Science and Management degree is being revised from no options to offering 2 options, Feed Production and Biofuels Production. In addition, the sequencing of certain courses has been modified. Deletions of courses in Algebra, Trig and Computer Science were dropped in the Fall of 2008.

IMPACT: No departments outside of Grain Science will be affected as there are no core or required class additions or drops with this change. The new Feed Production curriculum guide rearranges the course sequence and incorporates previous changes.

Department of Horticulture, Forestry and Recreation Resources Changes to the Horticulture Major, Landscape Design Specialization: 1. Remove BIOCH 265 from Quantitative Sciences. Add 3 hours of Surveying electives.

Rationale: An error was made in preparing materials for College of Agriculture Course and Curriculum Committee's consideration Fall, 2007. Inadvertently BIOCH 265 was added as a requirement and Surveying elective was dropped. These changes applied to most of the other options in horticulture but never should have been included for the Landscape Design Specialization. We are simply correcting this error.

#### Department of Plant Pathology

Add: Applied Genomics and Biotechnology Minor

K-State's minor in Applied Genomics and Biotechnology was developed to enhance the career options for students in animal and plant sciences. Upon completion of the minor, students will be more competitive to enter the workforce in the genomics and biotechnology area as well as be more prepared to continue on in a graduate research program.

Graduates of the program will have a broad knowledge of the application of biotechnology (e.g. techniques, ethics, potential risk, and intellectual property rights), genomics, and bioinformatics to plant and animal improvement. Students will exposed to techniques such as molecular cloning, PCR, genetic and disease diagnostics, as well as, bioinformatics analyses of genomic data, including sequence alignment, retrieval of data from public databases, DNA marker diversity and inheritance studies, genome mapping, and gene expression.

The minor requires a total of 17-21 semester hours. To pursue the Applied Genomics and Biotechnology minor the student must file a letter of intent with the program coordinator prior to taking the last 3 courses. The undergraduate research project or internship must be pre-approved by the minor coordinator and students must enroll in PLPTH 614, PLPTH 599 or equivalent to present a final report.

#### 17-21 hrs required:

| BIOCH 521 General Biochemistry                                                      |     | 3      |
|-------------------------------------------------------------------------------------|-----|--------|
| ASI 500 Genetics                                                                    |     | 3      |
| or<br>BIOL 450 Modern Genetics                                                      |     | 4      |
| PLPTH 610/AGRON610 Biotechnology<br>PLPTH 611 Agricultural Biotechnology Laboratory |     | 3<br>2 |
| BIOL 676 Molecular Genetics Lab                                                     |     | 3      |
| PLPTH 612 Genomics Applications                                                     |     | 3      |
| PLPTH 613 Bioinformatics Applications                                               |     | 2      |
| PLPTH 599 Undergraduate research in Plant Pathology or equivalent or                | 1-3 |        |
| PLPTH 614 Internship or equivalent                                                  |     | 1-3    |

RATIONALE: The Applied Genomics and Biotechnology minor will enhance student employment options by providing current technical knowledge and laboratory experience for specific techniques used in agriculture biotechnology.

IMPACT: Departments of Agronomy, Animal Science, Biology, Biochemistry, CIS, Entomology, Human Nutrition, Horticulture, and Grain Science have agreed.

EFFECTIVE DATE: Fall 2008

- 4. Graduation list changes
  - A. Approve the following addition to the May 2007 graduation list: Christopher Brown Seymore, Bachelor of Science, College of Arts & Sciences
- 5. Committee Reports
  - A. University Library Committee Mohan Ramaswamy
  - B. Committee on Academic Policy and Procedures (CAPP) Doris Carroll
  - C. General Education Task Force Melody LeHew
- 6. Old Business
  - A. Faculty Senate elections update Final ballots were sent out by each unit. Final results are due in the Faculty Senate office by April 7th.
  - B. Course and Curriculum Policy Proposal update
  - C. Plagiarism definition update
  - D. Substitute for March 31 Exec meeting and April 1 Academic Affairs meeting
- 7. New Business
- 8. For the good of the University
- 9. Adjourn

## <u>Attachment 1</u> <u>Undergraduate Meat Science Certificate</u> Department of Animal Sciences and Industry Kansas State University

**RATIONALE:**The second largest industry in Kansas is the Meat Processing Industry, and Kansas ranks<br/>second in the nation in meat processing. Our Meat Science group receives job<br/>announcements and contacts nearly every week for graduates with a specialization in<br/>Meat Science. Because we do not have a 'major' or 'option' in Meat Science, and<br/>because some students in Agricultural Economics also have an interest in the Meat<br/>Processing Industry, we currently do not have a good method for identifying and advising<br/>students who have an interest in the Meat Processing Industry. A 'Meat Science<br/>Certificate' program should allow us to better identify, advise, and prepare students for<br/>the numerous and various kinds of jobs in the Meat Processing Industry. Our Meat<br/>Science Advisory Group strongly supports a 'certificate program.'

| <b>Requirements:</b> | 20 hours from the following: |
|----------------------|------------------------------|
|                      |                              |

| Required courses:                                                 | Hours  |
|-------------------------------------------------------------------|--------|
| ASI 350 Meat Science (ASI 340 if off campus student)              | 2 or 3 |
| FDSCI 690 Principles of HACCP                                     | 2      |
| <u>Select 8 to 15 hours from the following:</u>                   |        |
| ASI 361 Meat Animal Processing                                    | 2      |
| ASI 370 Principles of Meat Evaluation                             | 2      |
| ASI 315 Livestock and Meat Evaluation                             | 3      |
| ASI 495 Advanced Meat Judging                                     | 2      |
| ASI 610 Processed Meat Operations                                 | 2      |
| ASI 661 Meat Study Tour                                           | 1      |
| ASI 671 Meat Selection and Utilization (on or off campus student) | 2      |
| ASI 777 Meat Technology (ASI 776 if off campus student)           | 3      |
| FDSCI 307 Applied Microbiology for Meat and Poultry Processors    | 3      |
| Select 0 to 7 hours from the following:                           |        |
| ASI 310 Poultry and Poultry Products Evaluation                   | 2      |
| ASI 303 History and Attitudes of Animal Use                       | 3      |
| ASI 318 Fundamentals of Nutrition                                 | 3      |
| or                                                                |        |
| HN 132 Basic Nutrition                                            | 3      |
| ASI 661 Problems in Meat Science                                  | 2-3    |
| ASI 599 Internship                                                | 1-3    |
| ASI 640 Poultry Products Technology                               | 3      |
| FDSCI 302 Introduction to Food Science                            | 3      |
| FDSCI 305 Fundamentals of Food Processing                         | 3      |
| FDSCI 607 Food Microbiology                                       | 4      |
| FDSCI 695 Quality Assurance of Food Products                      | 3      |
| FDSCI 740 Research & Development of Food Products                 | 4      |

## Student Learning Outcomes Animal Sciences and Industry Meat Science Certificate Program College of Agriculture

## Certificate Program Graduates will have demonstrated:

- 1. The ability to apply critical thinking and problem-solving skills to the meat industry.
- 2. The application of scientific principles to the fresh and further processed meat industries.
- 3. The ability to learn and develop skills (technical, practical, qualitative and quantitative) to deal with potential changes in meat science and related industries.

KSU Undergraduate Student Learning Outcomes

> Knowledge Critical Thinking

Knowledge Critical Thinking

Person Professional Development, Ownership of Learning

# Undergraduate Meat Science Certificate – Department of Animal Sciences and Industry Assessment of Student Learning Plan

Kansas State University

### College, Department, and Date

| College:    | Agriculture                  |
|-------------|------------------------------|
| Department: | Animal Sciences and Industry |
| Date:       | January 24, 2008             |

### Contact Person(s) for the Assessment Plans

Michael E. Dikeman, Meat Science Section Coordinator David Nichols, Teaching Coordinator for Animal Science and Industry Mishelle Hay, Academic Administrative Assistant

## **Degree Program**

Undergraduate Certificate in Meat Science

## Assessment of Student Learning Three-Year Plan

### Student Learning Outcome(s): Students will demonstrate:

Ability to apply critical thinking and problem-solving skills to the meat industry. Application of scientific principles to the fresh and further processed meat industries. Ability to learn and develop skills (technical, practical, qualitative and quantitative) to deal with potential changes in meat science and related industries. Special rationale for selecting these learning outcomes (optional): None

|                 | University-wide SLOs Undergraduate Programs |                      |               |           |                                         | Program SLO is                                    |
|-----------------|---------------------------------------------|----------------------|---------------|-----------|-----------------------------------------|---------------------------------------------------|
| Program<br>SLOs | Knowledge                                   | Critical<br>Thinking | Communication | Diversity | Academic /<br>Professional<br>Integrity | conceptually<br>different from<br>university SLOs |
| A               | X                                           | X                    |               |           |                                         | no                                                |
| В               | X                                           | X                    |               |           |                                         | no                                                |
| С               | X                                           |                      | X             |           |                                         | no                                                |

## <u>Relationships to K-State Student Learning Outcomes (insert the program SLOs and check all that apply):</u>

# How will the learning outcomes be assessed? What groups will be included in the assessment?

|                           | MEASURES           |          | WHO IS ASSESSED?                 |
|---------------------------|--------------------|----------|----------------------------------|
| SLO                       | DIRECT             | INDIRECT |                                  |
| Critical thinking and     | Selected questions |          | Certificate students in ASI 350, |
| problem-solving skills to | from a range of 1  |          | FDSCI 690                        |
| the meat industry         | to 4 exams in ASI  |          |                                  |
|                           | 350 & FDSCI 690    |          |                                  |

| Critical thinking and<br>problem-solving skills to<br>the meat industry                                                                                                          | Selected questions<br>from a range of 1<br>to 4 exams in ASI<br>350 & FDSCI 690 |                                  | Certificate students in ASI 350,<br>FDSCI 690 |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|----------------------------------|-----------------------------------------------|
|                                                                                                                                                                                  |                                                                                 | Sr Exit Interviews               | Students graduating in ASI & FDSCI            |
|                                                                                                                                                                                  |                                                                                 | Alumni and/or<br>company surveys | 3 to 5 yr grads and recently hired students   |
|                                                                                                                                                                                  |                                                                                 |                                  |                                               |
| Application of scientific<br>principles to the fresh and<br>further processed meat<br>industries                                                                                 | Selected questions<br>from a range of 1<br>to 4 exams in ASI<br>350 & FDSCI 690 |                                  | Certificate students in ASI 350,<br>FDSCI 690 |
|                                                                                                                                                                                  |                                                                                 | Sr Exit Interviews               | Students graduating in ASI & FDSCI            |
|                                                                                                                                                                                  |                                                                                 | Alumni and/or<br>company surveys | 3 to 5 yr grads and recently hired students   |
|                                                                                                                                                                                  |                                                                                 |                                  |                                               |
| Ability to learn and<br>develop skills (technical,<br>practical, qualitative and<br>quantitative) to deal with<br>potential changes in meat<br>science and related<br>industries | Selected questions<br>from a range of 1<br>to 4 exams in ASI<br>350 & FDSCI 690 |                                  | Certificate students in ASI 350,<br>FDSCI 690 |

|                                                                                                                                                                                     | TIMETA                   | CREATION                 |                                            |                                          |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------------------------|------------------------------------------|
| SLO                                                                                                                                                                                 | 2008                     | 2009                     | 2010                                       | OF BASELINE                              |
| Critical thinking and<br>problem-solving skills<br>to the meat industry                                                                                                             | ASI 350 and<br>FDSCI 690 | ASI 350 and<br>FDSCI 690 | ASI 350 and<br>FDSCI 690                   | Baseline created<br>after spring<br>2008 |
|                                                                                                                                                                                     |                          |                          | 5 year alumni<br>and/or company<br>surveys | Baseline created<br>after spring<br>2009 |
| Application of<br>scientific principles to<br>the fresh and further<br>processed meat<br>industries                                                                                 | ASI 350 and<br>FDSCI 690 | ASI 350 and<br>FDSCI 690 | ASI 350 and<br>FDSCI 690                   | Baseline created<br>after spring<br>2008 |
|                                                                                                                                                                                     |                          |                          | 5 year alumni<br>and/or company<br>surveys | Baseline created<br>after spring<br>2009 |
| Ability to learn and<br>develop skills<br>(technical, practical,<br>qualitative and<br>quantitative) to deal<br>with potential changes<br>in meat science and<br>related industries | ASI 350 and<br>FDSCI 690 | ASI 350 and<br>FDSCI 690 | ASI 350 and<br>FDSCI 690                   | Baseline created<br>after spring<br>2008 |
|                                                                                                                                                                                     |                          |                          | 5 year alumni<br>and/or company<br>surveys | Baseline created<br>after spring<br>2009 |

### What is the unit's process for using assessment results to improve student learning?

The Meat Science Faculty will review the results of the assessment. Adjustments to courses and curriculum will be developed and presented to the entire faculty and college once baseline data are developed. Changes in course offerings, content, and curriculum will be used for student performance improvement.