

Board of Regents, State of Iowa

**REQUEST TO IMPLEMENT A NEW BACCALAUREATE, MASTERS,
DOCTORAL OR FIRST PROFESSIONAL DEGREE PROGRAM**

THE PURPOSE OF ACADEMIC PROGRAM PLANNING: Planning a new academic degree program provides an opportunity for a Regent University to demonstrate need and demand as well as the university's ability to offer a quality program that is not unnecessarily duplicative of other similar programs offered by colleges and universities in Iowa.

Institution: **Iowa State University**

Departments involved: **Animal Science**

Food Science and Human Nutrition

CIP Discipline Specialty Title: **Animal Science**

CIP Discipline Specialty Number (six digits): **010901**

Level: **Baccalaureate**

Title of Proposed Program: **Minor in Meat Science**

Degree Abbreviation (e.g., Minor, B.S., B.A., M.A.): **Minor**

Approximate date to establish degree: Month **May**

Year **2008**

Contact person(s): (name, telephone, and e-mail)

Steven Lonergan, 515-294-9126, slonerga@iastate.edu

Doug Kenealy, 515-294-6022, dkenealy@iastate.edu

Please provide the following information (use additional pages as needed).

1. Describe the proposed new degree program, including the following:
 - a. **A brief description of the program and a statement of objectives including the student learning outcomes and how the learning outcomes will be assessed;**

The Minor in Meat Science provides a framework for students to study and document expertise in Meat Science. This minor is an interdisciplinary curriculum that directs students in an in-depth survey of meat production, meat quality, meat safety and meat processing. It is expected that this minor will be primarily utilized by students majoring in Animal Science, Agricultural and Biosystems Engineering, Agricultural Systems Technology, or Food Science and Human Nutrition. However, enrollment in this program will be open to all undergraduate majors at Iowa State University.

Students who complete the Minor in Meat Science will be able to apply their expertise from their major course of study in the context of important industry issues in meat science. This Minor will advance the opportunity of Iowa State University students by integrating the technical topics in meat science with their own discipline. Such integration is in high demand in the meat and food industry. Students completing this minor will have the background required to address critical problems in the meat industry by integrating their expertise with a focused study in Meat

Science. This will provide them with the distinct advantage in the job market, because they will be able to document their education in meat science.

Students who complete this program successfully will be able to:

Describe and apply the features of hazard analysis critical control point (HACCP) and the essentials in the production of wholesome meat products.

Recognize the physical, chemical, microbiological, and environmental influences on product quality and preservation of meat products.

Discuss the importance of the composition and nutritive value of meat products and their impact on human health.

Determine market value of animals and animal products according to USDA and industry standards.

Understand the relationship between muscle anatomy, muscle composition, muscle structure, and the ultimate quality of meat.

Troubleshoot problems related to fresh and processed meat quality and safety

Discuss the major issues currently facing the meat industry, both domestically and internationally.

Relate fresh meat properties to quality and/or safety characteristics of meat products.

Formulate new products and develop new processes to improve meat marketability.

Evaluate products and processes for important quality characteristics, which determine consumer acceptability of meat.

Assess and communicate problems and solutions effectively with established personnel in the meat industry.

Develop useful information for consumers regarding quality, safety and nutritional issues affecting meat products.

b. The relationship of the proposed new program to the institutional mission and how the program fits into the institution's, college's, and department/program's strategic plan;

The Mission of Iowa State University is to **“Create, share and apply knowledge to make Iowa and the world a better place”**.

The Minor in Meat Science is an opportunity for more students to take advantage of a strong Meat Science program that is actively:

- 1) Creating new information through excellent research programs
- 2) Sharing that information in classrooms and in industry workshops
- 3) Applying that knowledge with other scientists and industry leaders

The Vision of the Iowa State University Strategic plan states that: **“Iowa State University will be the best at advancing the land-grant ideals and putting science and technology to work.....Students will become broadly educated, global citizens who are culturally informed, technologically adept, and ready to lead.”**

The proposed Minor in Meat Science encourages students from broad disciplines to work together on topics in meat science. Inclusion of students from broad disciplines to focus on the curriculum defined in this Minor will result in a synergy of the learning environment and advancement of openness and sharing to creatively approach problems in meat quality, meat production, and meat safety.

One of the stated goals in the Mission of College of Agriculture and Life Sciences is to **“prepare students to become future leaders in agriculture and in society”**. The proposed Minor in Meat Science contributes to this goal as it enhances the technical expertise of students. Students that complete the Minor will be prepared to use that information with the knowledge gained in their major program to lead in agriculture and food production.

A primary objective of the teaching program in the Animal Science Departmental Strategic Plan is **“Make our graduates more competitive and entrepreneurial.”** Our students are already held in high esteem by the meat industry. Students that complete this Minor in Meat Science will be in demand in the meat industry regardless of their Major area of study. Meat Industry companies continue to demand graduates with coursework in meat science.

c. The relationship of the proposed new program to other existing programs at the institution; describe how the proposed program will enhance other programs at the university.

By offering to expand the awareness of meat industry topics and technical competence in meat science, this Minor in Meat Science will provide Iowa State University students a better understanding of critical topics in meat safety, meat quality, meat trade and policies that affect the meat production and processing industries. This, in turn, will offer students a different context in the interactions of the technical aspects of meat science and their major disciplines, ultimately improving the students’ and graduates’ ability to make informed decisions on policies and issues that present themselves every day in the meat industry.

The proposed minor is unique from any other curriculum program on campus. One minor that is available to students with interests in food safety is the Food Safety Minor. The proposed minor is distinct from the Food Safety Minor because it 1) centers only on Meat Products and 2) is an exploration of all topics pertinent to meat science and industry – not just meat safety.

d. The relationship of the proposed new program to existing programs at other colleges and universities in Iowa, including how the proposed program is different or has a different emphasis than the existing programs;

The only Meat Science program in the state is at Iowa State University. It is expected that the availability of the Minor will develop an integration of a number of students across a number of majors.

e. Special features or conditions that make the institution a desirable, unique, or appropriate place to initiate such a degree program.

The Iowa State University Meat Science program is housed in the Animal Science department. This program is considered to be among the top programs in the country and is typically ranked first or second in the U. S. by a national trade journal Meat and Poultry. The Animal Science program at Iowa State is known as one of the most prestigious programs in the U. S.

The ISU Meat Lab is a modern, federally inspected facility with the capability for harvesting and complete processing of meat animals and poultry. It has a full complement of equipment, mostly of small commercial production size for manufacturing of the complete range of processed meats and poultry found in the market place. The meat laboratory also houses the Linear Accelerator for research and application development in irradiation of meat and other foods. Testimony to the unique and excellent facilities within the meat science laboratory is the frequent use of the facilities by industry for both research and continuing education.

f. Does the proposing institution have personnel, facilities, and equipment adequate to establish and maintain a high quality program?

Yes. Please refer to response in 1.e above.

g. How does student demand for the proposed program justify its development?

A voluntary survey of Animal Science 270 students enrolled in the Fall 2006 semester revealed that 27 out of 41 (65.8%) surveyed would be interested in pursuing the Minor described in this proposal. Twenty-four out of thirty-five Animal Science majors expressed interest in pursuing the Minor in Meat Science. Three out of six non Animal Science majors from the College of Agriculture and Life Sciences expressed interest.

It is noted that this sample is of students who have already expressed interest in meat science by virtue of their enrollment in Animal Science 270. However, the demand appears to be more than adequate to meet the expected enrollment figures presented in this proposal (Section 3).

2. Describe the state and/or national workforce need and/or demand for graduates of the proposed program currently and in the near future (provide documentation about the sources of data used to estimate need and demand.)

The Minor in Meat Science provides a curriculum for students in broad disciplines to document expertise in meat science. Each year over thirty meat and food processing companies attend the College of Agriculture and Life Sciences Career Day to recruit ISU students. These companies include Cargill, Tyson, Swift and Company, ConAgra, Burke Corporation, Farmland Foods, and Hormel Foods. Of course these companies are interested in the students that have solid Animal and Food Science expertise for the technical career paths in production, quality assurance and product development. Documentation of a Meat Science Minor within Animal or Food Science provides the students with the expertise and differentiates them from students in similar majors at other institutions.

The meat industry companies also recruit students from engineering, accounting, marketing, and management. Graduates holding these degrees with a Minor in Meat Science will be in high demand by the companies listed above because the companies will not be required to provide as much additional training opportunities to a new hire that already has some technical expertise and familiarity with the meat industry.

- 3. List all other public and private institutions of higher education in Iowa currently operating programs similar to the proposed new degree program. (For comparison purposes, use a broad definitional framework, e.g., such identification should not be limited to programs with the same title, the same degree designation, having the same curriculum emphasis, or purporting to meet exactly the same needs as the proposed program.)**

No other Iowa institution offers a Minor of this type.

If the same or similar program exists at another public or private institution of higher education in Iowa, respond to the following questions:

- a. Could the other institution reasonably accommodate the need for the new program through expansion? Through collaboration?
 - b. With what representatives of these programs has there been consultation in developing the program proposal? Provide a summary of the response of each institution consulted.
 - c. Has the possibility of an inter-institutional program or other cooperative effort been explored? What are the results of this study? (Consider not only the possibility of a formally established inter-institutional program, but also how special resources at other institutions might be used on a cooperative basis in implementing the proposed program solely at the requesting institution.)
- 4. Estimate the number of majors and non-majors students that are projected to be enrolled in the program during the first seven years of the program.**
- a. Undergraduate

| Undergraduate | Yr 1 | Yr 2 | Yr 3 | Yr 4 | Yr 5 | Yr 6 | Yr 7 |
|---------------|------|------|------|------|------|------|------|
| Majors | NA | NA | NA | NA | NA | NA | NA |
| Non-Majors | 15 | 30 | 45 | 45 | 45 | 45 | 45 |

- b. Graduate

| Graduate | Yr 1 | Yr 2 | Yr 3 | Yr 4 | Yr 5 | Yr 6 | Yr 7 |
|------------|------|------|------|------|------|------|------|
| Majors | NA | NA | NA | NA | NA | NA | NA |
| Non-Majors | NA | NA | NA | NA | NA | NA | NA |

- c. What are the anticipated sources of these students?

Students from all colleges at Iowa State University, with the exception of the College of Veterinary Medicine and the Graduate College, are eligible to enroll in this Minor. It is anticipated that the majority of the students will be from the College of Agriculture and Life Sciences.

5. **If there are plans to offer the program away from the campus, briefly describe these plans, including potential sites and possible methods of delivery instruction.**

NA

6. **Has the proposed program been reviewed and approved by the appropriate campus committees and authorities? YES. List them:**

Animal Science Curriculum Committee, Dr. Curt Youngs, Chair

Food Science and Human Nutrition Curriculum Committee, Dr. Cheryll Reitmeier, Chair

College of Agriculture and Life Sciences Curriculum Committee, Dr. Wade Miller, Chair (April 9, 2007 approval)

College of Agriculture and Life Sciences Administration. Dean David Acker (November 15, 2007 approval).

Faculty Senate Curriculum Committee, Dr. Jim Thompson, Chair (November 29, 2007 approval)

7. **List date the program proposal was submitted to the Iowa Coordinating Council for Post High School Education (ICCPHSE) and the results of listserv review. (THIS WILL BE FILLED IN BY THE PROVOST OFFICE.)**

8. **Will the proposed program apply for accreditation? When?**

No

9. **Will articulation agreements be developed for the proposed program? With whom?**

No

10. Describe the faculty, facilities, and equipment that will be required for the proposed program.

The faculty, facilities and equipment for the proposed programs will be those already supporting the degree-granting departments (Animal Science and Food Science and Human Nutrition).

11. From where will the financial resources for the proposed program come (list all that apply, e.g., department reallocation, college reallocation, grants, new to the university)?

See Number 12 below.

12. Estimate the total costs/total new costs (incremental increases each year in expenditures) that will be necessary for the next seven years as a result of the new program:

This minor provides a curriculum in Meat Science that uses existing courses. Therefore additional expenses are not expected.

**Supplemental materials
(to be used at Iowa State University in the review of the proposal):**

**13. Program requirements, including:
a. prerequisites for prospective students;**

Any undergraduate student at Iowa State may enroll in the Minor in Meat Science Program. Students majoring in Animal Science will NOT be allowed to count the 9 required credits (Animal Science 270, 360, 460) toward their Animal Science degree.

The following required courses in Animal Science have the corresponding pre-requisite courses:

Animal Science 270, Foods of Animal Origin: Biology 212, Chem 163 or Chem 177
Animal Science 360, Fresh Meats; Animal Science 270, course in organic chemistry, or biochemistry
Animal Science 460, Processed Meats: Animal Science 270

The following courses within the menu courses have the corresponding pre-requisite courses:

Animal Science 489, Issues in Food Safety: Credit or enrollment in FS HN 101 or 272 or HRI 233; FS HN 419 or 420; FS HN 403.

Animal Science 490C, Independent Study in Meat Science: Permission of the instructor.

Food Science and Human Nutrition 311, Food Chemistry: FS HN 203, Chem 231 and 231L or 331 and 331L; credit or enrollment in BBMB 301.

Food Science and Human Nutrition 403, Food Laws, Regulations, and the Regulatory Process: 3 credits in food science coursework at 200 level or above.

Food Science and Human Nutrition 405, Food Quality Assurance: FS HN 214 or 272 or 471; Stat 101 or 104.

Food Science and Human Nutrition 406, Sensory Evaluation of Food: FS HN 214 or 311 or An S 360; 3 credits in statistics.

Food Science and Human Nutrition 410, Food Analysis: FS HN 214 or 311 or BBMB 311 or Chem 211.

Food Science and Human Nutrition 412, Food Product Development: FS HN 311 or 411, 471.

Food Science and Human Nutrition 419, Foodborne Hazards: Micro 201 or 302, a course in biochemistry.

Food Science and Human Nutrition 420, Food Microbiology: Micro 201 or 302.

Food Science and Human Nutrition 471, Food Processing. : Micro 201 or 302; Chem 163; Phys 106.

Micro 407, Microbiological Safety of Foods of Animal Origins: Micro 420.

b. language requirements;

No language requirements will be used for the Minor in Meat Science.

c. courses and seminars presently available for credit toward the program;

All courses within the proposed Minor are already available. The proposed minor program will comply with all University requirements for minors, including the requirement that a minimum of 9 credits used to satisfy the course credits required for the minor may not be used to satisfy any other department, college, or University requirement.

Students majoring in Animal Science will NOT be allowed to count the 9 required credits (Animal Science 270, 360, 460) toward their Animal Science degree.

Required Courses

An S 270. Foods of Animal Origin. (2-2) Cr. 3. F.S. *Prereq:* Biol 212, Chem 163 or 177. Principles, practices and issues impacting the production, processing and preservation of safe, wholesome, nutritious, and palatable meat, dairy, and egg products. Product evaluation, classification, value, and utilization.

An S 360. Fresh Meats. (2-2) Cr. 3. F. *Prereq:* 270; a course in organic or biochemistry. Impact of muscle structure, composition, rigor mortis, inspection, fabrication, handling, packaging and cooking on the palatability, nutritional value, yields, market value, and safety of fresh meat. Nonmajor graduate credit.

An S 460. Processed Meats. (Dual-listed with 560.) (2-2) Cr. 3. S. *Prereq:* 270. Physical, chemical and biological properties of meat important to processed meat product characteristics. Ingredients, technology and equipment used for cured meats, loaf products and fresh, cooked, dry and semi-dry sausages products. Nonmajor graduate credit.

Menu 1 (One credit of the following)

An S 489. Issues in Food Safety. (Same as FS HN 489, HRI 489, VDPAM 489.) (1-0) Cr. 1. Alt. S., offered 2007. *Prereq:* Credit or enrollment in FS HN 101 or 272 or HRI 233; FS HN 419 or 420; FS HN 403. Capstone seminar for the food safety minor. Case discussions and independent projects about safety issues in the food system from a multidisciplinary perspective.

An S 490C. Independent Study in Meat Science. Cr. 1 to 3. F.S.SS. *Prereq:* Permission of the instructor. A maximum of 6 credits of 490 may be used toward the total of 128 credits required for graduation. Open to juniors and seniors in animal science and dairy science showing satisfactory preparation for problems chosen. Individual topic conference and preparation of report. □

Menu 2 (Six credits from the following list)

FS HN 311. Food Chemistry. (2-3) Cr. 4. F. *Prereq:* 203, Chem 231 and 231L or 331 and 331L; credit or enrollment in BBMB 301. The structure, properties, and chemistry of food constituents and animal and plant commodities. Nonmajor graduate credit.

FS HN 403. Food Laws, Regulations, and the Regulatory Process. (2-0) Cr. 2. S.SS. *Prereq:* 3 credits in food science coursework at 200 level or above. History of the development of the current federal and state food regulations. Guidelines that govern the practice of regulating the wholesomeness of red meats, poultry, and eggs. Presentations by state and federal food regulators. Nonmajor graduate credit.

FS HN 405. Food Quality Assurance. (2-2) Cr. 3. S. *Prereq:* 214 or 272 or 471; Stat 101 or 104. Basis of food quality control/assurance programs and establishment of decision-making processes using official (government and industry) instrumental, chemical, and sensory procedures. Statistical process and quality control procedures and their applications to various food systems. Development of hazard analysis procedures, specifications, grades, and standards. Nonmajor graduate credit.

FS HN 406. Sensory Evaluation of Food. (Dual-listed with 506.) (2-3) Cr. 3. F. *Prereq:* 214 or 311 or An S 360; 3 credits in statistics. Sensory test methods and procedures used to evaluate the flavor, color and texture of foods. Relationships between sensory and instrumental measurements of color and texture. Acceptance and preference testing.

FS HN 410. Food Analysis. (2-3) Cr. 3. S. *Prereq:* 214 or 311 or BBMB 311 or Chem 211. An introduction to the theory and application of physical and chemical methods for determining the constituents of food. Modern separation and instrumental analysis. Use of food composition data bases. Nonmajor graduate credit.

FS HN 412. Food Product Development. (Dual-listed with 512.) (2-6) Cr. 4. S. *Prereq:* 311 or 411, 471. Principles of developing consumer packaged food products. Application of skills gained in food chemistry, formulation, microbiology, and processing. Some pilot plant experiences. Electronic communication from web emphasized for class reports, notes and assignments. Nonmajor graduate credit.

FS HN 419. Foodborne Hazards. (Same as Micro 419, Tox 419.) (3-0) Cr. 3. Alt. S., offered 2006. *Prereq:* Micro 201 or 302, a course in biochemistry. Pathogenesis of human microbiological foodborne infections and intoxications, principles of toxicology, major classes of toxicants in the food supply, governmental regulation of foodborne hazards. Only one of 419 and 519 may count toward graduation. Nonmajor graduate credit.

FS HN 420. Food Microbiology. (Same as Micro 420, Tox 420.) (3-0) Cr. 3. F. *Prereq:* Micro 201 or 302. Effects of microbial growth in foods. Methods to control, detect, and enumerate microorganism in food and water. Foodborne infections and intoxications. Nonmajor graduate credit.

FS HN 471. Food Processing. (3-0) Cr. 3. F. *Prereq:* Micro 201 or 302; Chem 163; Phys 106. Food preservation, including packaging, fermentation, irradiation, canning, freezing, dehydration, additives. Sanitation and plant design. Applications to food products. Nonmajor graduate credit.

Micro 407. Microbiological Safety of Foods of Animal Origins. (Dual-listed with 507, same as FS HN 407.) (3-0) Cr. 3. S. *Prereq:* 420. Examination of the various factors in the production of foods of animal origin, from animal production through processing, distribution and final consumption which contribute to the overall microbiological safety of the food. The two modules of this course will be 1) the procedures and processes which can affect the overall microbiological safety of the food, and 2) the Hazard Analysis Critical Control Point (HACCP) system.

In summary, the requirements for the proposed Minor in Meat Science are:

- 1) Required 9 credits (An S 270, 360, 460) (If these courses are applied toward the Minor, Animal Science majors cannot use these credits toward the Animal Science degree)
- 2) One credit from Menu 1
- 3) Six credits from Menu 2

d. proposed new courses or modifications of existing courses;

The proposed minor will not require new courses or modification of existing courses.

e. thesis and non-thesis options in master's programs;

NA

f. implications for related areas within the university;

The proposed minor has the potential to increase the enrollment and workload of the Animal Science and Food Science and Human Nutrition departments. It is predicted that the increase in enrollment will be modest, especially for the courses listed in "Menu 2". The greatest likelihood of increased enrollment is in Animal Science 270, 360 and 460, as these are mandatory courses. If enrollment in these courses increases to the point that additional sections must be offered, then additional resources may be needed to sustain the program. It is predicted, however, that the increase in enrollment will be modest.

g. admissions standards for graduate programs

NA

14. Attach to the program proposal memos from the department chair(s), the college dean(s), and other appropriate persons, agreeing to the allocation of new resources and/or the reallocation of resources as described in the Regents questions
15. Attach to the program proposal, letters of support, recommendations, and statements when appropriate:
 - a. from programs at the other Regents universities
 - b. from programs and departments at ISU which are associated with the proposed program or have an interest in the proposed program

IOWA STATE UNIVERSITY
OF SCIENCE AND TECHNOLOGY

Agricultural & Biosystems Engineering
217 Davidson Hall
Ames, Iowa 50011-3080
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Email: cjbern@iastate.edu

January 3, 2007

To: Dr. Steve Lonergan
Meat Science and Muscle Biology
Animal Science Department

From: Carl Bern, Chair
Agricultural Engineering Curriculum Committee



RE: Meat Science Minor

I am pleased to endorse your proposed Meat Science Minor, and I want to thank your committee for the effort and innovation you've demonstrated in assembling it. I will discuss how I see this minor benefiting our students. Other majors in the College of Agriculture and in other colleges may also find it attractive.

For students majoring in an ABE degree area (agricultural engineering or agricultural systems technology), this minor would be valuable in preparing for positions in the meat and food processing industry. Our students are already being hired by these industries; This minor will no doubt enhance their opportunities.

For students majoring in agricultural engineering, food and biosystems option, completion of this minor would be a unique and valuable preparation for engineering positions in the meat processing equipment industry, as well as in the meat processing industry. You and I have both heard of the opportunities here from equipment manufacturer Stork-Townsend Inc.

Additionally, this minor may be attractive for agricultural systems technology majors in the agricultural and biological systems management option with an interest in meat processing. They could build their concentration area around meat science.

IOWA STATE UNIVERSITY
OF SCIENCE AND TECHNOLOGY

Department of Economics
174 Heady Hall
FAX 294-0221

Interoffice Communication

Date: December 27, 2006

To: Steven Lonergan
Associate Professor
Department of Animal Science
2372 Kildee Hall

From: Ron Deiter *Ron Deiter*
Professor
Department of Economics
174 Heady Hall

Re: Meat Science Minor (Proposal)

Thank you for sharing with me information on a new Meat Science minor that, as I understand it, is being considered by your department. Based on the proposed requirements in the draft you sent to me earlier this month, I would like to lend my support of the proposal on behalf of our Department of Economics and our Ag Business program. I discussed this topic briefly with the Chair of our department, Dr. Hallam, and he concurs.

In my current position, among other things, I advise a number of undergraduate Ag Business majors, I teach an Agri Selling class, and I also teach a Graduating Senior Survey class. I also play a liaison role between our students and industry representatives who wish to hire our students after they graduate. In these roles, I am aware that some of our students have livestock industry backgrounds and they wish to pursue various business-related careers which, in some cases, have a meat science focus. Specific examples with companies involved in businesses related to meat processing/marketing would include quality assurance, meat sales, livestock procurement, animal health sales, as well as feed production and feed consulting. I believe students would be better prepared from a technical perspective for these types of careers by completing the proposed Meat Science minor.

From my perspective, my only concern is that we are not likely to have many of our students take advantage of this opportunity. That's because a significant majority of our students pursue other careers after they graduate and because we have not seen many of our majors declare the somewhat new and related Food Safety minor.

Given all of the classes in the proposed minor are already being taught, I am of the opinion that 'packaging' them to allow students to declare a minor is likely to create benefits for students and corporate recruiters that outweigh any additional departmental costs. It would seem to me that this minor could always be cancelled rather easily if the number of students ultimately participating in the minor do not warrant its continuation.

If you have any questions or comments regarding my comments, feel free to contact me (294-5771, rdeiter@iastate.edu). Thank you for allowing me the opportunity to provide you with my input.

From: Reitmeier, Cheryl A [FSHNH] <creitmei@iastate.edu>
Date: Thursday, February 1, 2007 9:44 AM
To: slonerga@iastate.edu, "Youngs, Curtis R [AN S]"
Subject: Minor in Meat Science

The FSHN Curriculum Committee voted to support the graduate minor in Meat Science on Friday, Jan. 26. No objections or concerns were raised. Cheryl

Cheryll Reitmeier
Professor
Dept. Food Science and Human Nutrition
Iowa State University
Ames, IA 50011
515-294-4325

|

Subject: RE: Minor in Meat Science

Date: Thursday, November 15, 2007 7:35 AM

From: Acker, David G [AEX S] <dacker@iastate.edu>

To: "Lonergan, Steven M [AN S]" <slonerga@iastate.edu>, <dacker@iastate.edu>

Cc: "Kenealy, Michael D [AN S]" <dkenealy@iastate.edu>, "Youngs, Curtis R [AN S]" <cryoungs@iastate.edu>, "Miller, William W [AGEDS]" <wwmiller@mail.adp.iastate.edu>

Conversation: Minor in Meat Science

Steven

I have reviewed the proposal and approve on behalf of the college.

Wade can advise you on any forms that are required from this point forward.

David

David Acker

Associate Dean, Academic and Global Programs

College of Agriculture and Life Sciences

Iowa State University

From: Lonergan, Steven M [AN S] [mailto:slonerga@iastate.edu]

Sent: Wednesday, November 14, 2007 5:17 PM

To: dacker@iastate.edu

Cc: Kenealy, Michael D [AN S]; Youngs, Curtis R [AN S]; Miller, William W [AGEDS]

Subject: Minor in Meat Science

Dean Acker,

The attached file includes the proposal for a Minor in Meat Science. This was approved by the Animal Science Department. It has also been endorsed by Agricultural and Biosystems Engineering, Food Science, and Ag Business Faculty. Last April it was approved by the College of Agriculture (now College of Agriculture and Life Sciences) curriculum committee.

I am told by Wade Miller that the proposal requires your approval before this is forwarded to the Faculty Senate Curriculum Committee. I am requesting your approval, and am willing to meet with you at your convenience to address any questions you might have about the proposal.

Thank you for considering my request.

