



UNIVERSITY OF KENTUCKY

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**ASSOCIATE PROVOST FOR UNDERGRADUATE EDUCATION**

**Undergraduate Council**

**Transmittal**

**March 30, 2007**

**RECEIVED**

APR 4 2007

OFFICE OF THE  
SENATE COUNCIL

The following proposal is recommended for approval by the Undergraduate Council:

**College of Agriculture**

Proposal to reduce elective hours by a total of eight in the Animal Science BS Degree program.

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UNIVERSITY OF KENTUCKY

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March 16, 2007

MEMO

To: Dr. Phil Kraemer  
Undergraduate Council

From: Dr. Mike Mullen

A handwritten signature in black ink, appearing to read 'M. Mullen', written over a horizontal line.

Re: Program Change for Animal Science BS

Enclosed please find a proposal from the Department of Animal and Food Sciences for a change in their Animal Science BS Degree program. The changes here are to lower the total hours required from 128 to 120, by reducing elective hours by a total of eight. This was actually part of the curriculum revision in 2004, but the change in hours was somehow not made part of the record at that time.

We look forward to the approval of these changes.

APR 4 2007

**REQUEST FOR CHANGE IN UNDERGRADUATE PROGRAM**

**OFFICE OF THE SENATE COUNCIL**

Program Animal Sciences

Formal Option (if applicable) \_\_\_\_\_ or Specialty Field (if applicable) \_\_\_\_\_

Department (if applicable) Animal and Food Sciences

College (if applicable) Agriculture

Degree title BS in Animal Sciences Bulletin pages 83

CIP Code 02.0201 (09.0901?) UK ID No. \_\_\_\_\_ HEGIS Code \_\_\_\_\_

Accrediting Agency (if applicable) \_\_\_\_\_

**PROPOSED CHANGE(S) IN PROGRAM REQUIREMENTS**

1. Particular University Studies Requirements of Recommendations for this program

	Current	Proposed
Math	Completed by premajor requirement	no change
Foreign Language	Two years in high school or 6 hr sequence	no change
Inference-Logic	completed by premajor requirement	no change
Written Communication	ENG 104	no change
Oral Communication	Suspended	no change
Natural Sciences	completed by premajor requirement	no change
Social Sciences	any 6 hours from USP list	no change
Humanities	any 6 hours from USP list	no change
Cross-Cultural	any 3 hours from USP list	no change
Electives	at least 6 hrs with 3 outside the major	may be completed by pre-major requirement

2. College Depth and Breadth of Study Requirements (if applicable) (including particular courses required or recommended for this program) NOTE: To the extent that proposed changes in 2 through 6 involve additional courses offered in another program, please submit correspondence with the program(s) pertaining to the availability of such courses to your students.

Current	Proposed
GEN 100	GEN 100
GEN 200	
Total College Hours	
	3

3. Premajor or Preprofessional Course Requirements (if applicable)

Current	Proposed
CHE 105/107 (6 cr); BIO 150/152 (6 cr); MA 109 and 123 OR 113 (4 or 6 cr); CHE 115 (3 cr); ENG 203 (3 cr)	CHE 105/111/107/113 (9 cr); BIO 150/152* (6 cr); MA 123 OR 113* (3 or 4 cr); ENG 203W (3 cr)**
Total Premajor Hours	
	21-22

\*Satisfies USP requirements

\*\*Satisfies Graduation Writing Requirement

## REQUEST FOR CHANGE IN UNDERGRADUATE PROGRAM

4. Credit Hours Required
- a. Total Required for graduation: Current 128 Proposed 120 Note: Student must complete at least 45 hours at the 300 level or above.
- b. Required by level:      100 31      200 4      300 15      400-500 3
- c. Premajor or Preprofessional (if applicable)      21-22      f. Hours Needed for a Particular Option or Specialization (if applicable)      0-7
- d. Field of Concentration (if applicable) (Major Req)      32-36      g. Technical or Professional Support Electives (if applicable)      18-24
- e. Division of Hours between Major Subject and Related Field (if applicable)      \_\_\_\_\_      h. Minimum Hours of Free or Supportive Electives (required)      16 to 27 depending on option

5. Major or Professional Course Requirements

Current	Proposed
ASC 101 (3); ASC 102 (3); ASC 205 (1) ASC 325 (3); ASC 362 (4); ASC 364 (4); ASC 378 (4); ASC 470 (3) and at least 3 of the following: ASC 340 (2); 404G (4); 406 (4); 408G (2); 410G (3); 420G (3)	NO CHANGE
Total Major Hours <u>32-36</u>	

6. Minor Requirements (if applicable)

Current	Proposed
Total Minor Hours <u>          </u>	

TOTAL HOURS 120

7. Rationale for change(s): (If rationale involves accreditation requirements, please include specific references to those requirements.)

The Animal Science BS Degree was revised in 2004-05. At the same time, changes in the Undergraduate requirements for the College were underway, including decreasing the minimum credit hours from 128 to 120 hours and dropping GEN 200. This revision reflects that change in that GEN 200 has been removed, and the number of electives required have been reduced to 8 to 24, depending on the Option chosen in the curriculum. This proposal also reflects the recent changes in the Chemistry lab from 3 hours of CHE 115 to 1 hour in CHE 111 and 2 hours in CHE 113. There are no other changes in courses required for the major in this proposal.

## REQUEST FOR CHANGE IN UNDERGRADUATE PROGRAM

8. Please attach the current and proposed semester by semester program for this degree program.

Example for Animal Industry Option – Livestock Specialization

Current		Proposed	
Year 1 FALL	SPRING	Year 1 FALL	SPRING
ASC 101 (3)	ASC 102 (3)	ASC 101 (3)	ASC 102 (3)
USP Soc Sci (3)	CHE 107 (3)	ENG 104 (4)	CHE 107 (3)
ENG 104 (4)	CHE 115 (3)	MA 109 (3)*	CHE 113 (2)
MA 109 (3) *	GEN 100 (3)	CHE 105 (3)	GEN 100 (3)
CHE 105 (3)	Free Electives (3)	CHE 111 (1)	Free Elective (3)
Year 1: 31 credits		USP Soc Sci (3)	Year 1: 31 credits
YEAR 2 FALL		YEAR 2 FALL	
SPRING		SPRING	
ASC 205 (1)	BIO 152 (3)	ASC 205 (1)	BIO 152 (3)
BIO 150 (3)	GEN 200 (3)	BIO 150 (3)	USP Soc Sci (3)
ENG 203 (3)	USP Hum (3)	ENG 203 (3)	USP Hum (3)
USP Hum (3)	ASC 325 (3)	USP Hum (3)	ASC 325 (3)
MA 123 (3)	USP X-Cult	MA 123 (3)	USP X-Cult
CHE 236 (3)		CHE 236 (3)	
Year 2: 31 credits		Year 2: 31 credits	
YEAR 3 FALL		YEAR 3 FALL	
SPRING		SPRING	
ASC 300 (4)	ASC 362 (4)	ASC 300 (4)	ASC 362 (4)
ASC 364 (4)	ASC 378 (4)	ASC 364 (4)	ASC 378 (4)
USP Soc Sci (3)	Spec. Support (9)	Spec. Support (6)	Spec. Support (6)
Spec. Support (6)			
Year 3: 34 credits		Year 3: 28 credits	
YEAR 4 FALL		YEAR 4 FALL	
SPRING		SPRING	
ASC 470 (3)	Production Elec (3)	ASC 470 (3)	ASC 420G** (3)
Production Elec (3)	Spec. Support (3)	ASC 404G** (4)	Spec. Support (6)
Production Elec (3)	Free Electives (12)	ASC 408G** (2)	Free Electives (6)
Free electives (6)		Free electives (6)	
Year 4: 33 credits		Year 4: 30 credits	
TOTAL 129		TOTAL 120	

\* Assumes student needs course to satisfy Math requirement

\*\*These courses are Production electives that may be taken in this specialization.

Will this program be printed in the Bulletin?

YES x

NO

# REQUEST FOR CHANGE IN UNDERGRADUATE PROGRAM

## Signatures of Approval

Robert J. Harmon March 12, 2007  
Department Chair Date  
*This was approved with original curriculum change*

[Signature] MARCH 23, 2007  
Dean of the College Date

*Note: These changes were approved in January 2005 as part of a comprehensive revision. Somehow the 120 hour requirement never made it to the catalog.*

[Signature] 3/29/2007  
\*Undergraduate Council Date

\_\_\_\_\_  
\*University Studies Date

\_\_\_\_\_  
\*Graduate Council Date

\_\_\_\_\_  
Academic Council for the Medical Center Date

\_\_\_\_\_  
Senate Council Date of Notice to University Senate

\*If applicable, as provided by the Rules of the University Senate

\_\_\_\_\_  
ACTION OTHER THAN APPROVAL

## **Bachelor of Science in Animal Sciences**

Animals have many important roles in human societies including the provision of food and fiber, draft power, recreational and athletic activities, and companionship. In addition, animals and their interactions with humans have environmental consequences. The processing, preservation, and quality of animal-derived foods are of significant economic and safety importance. Animal Sciences involves studying and applying the basic principles of nutrition, reproduction, and genetics to the production and management of animals including horses, dairy and beef cattle, sheep, swine, poultry, and other domesticated species. Additional coursework provides information on the production and handling of animal-derived foods.

No one program fits all Animal Sciences students. Students come from varied backgrounds and their interests range from livestock and poultry production and management to marketing and public relations; from public education and extension to graduate training in research and teaching and veterinary medicine. No matter what species you have an interest in, the Animal Sciences major will allow you to combine your interest with your desire for an exciting and rewarding career. As an Animal Sciences major, students have the opportunity to pursue specific interests by selecting one of three study options: Animal Industry, Food Industry or Pre-Professional. The Animal Industry option is for those students interested in animal production and management and can specialize in one of three areas: livestock, equine, or dairy. The Food Industry option is designed to provide an emphasis on aspects of food processing, chemistry, safety. The Pre-Professional option is a rigorous study program for students with interests in veterinary sciences, human medicine, and graduate research.

### **Career Opportunities**

To keep pace with the food, fiber, and recreation requirements of a growing world population, Animal Sciences graduates are needed in the livestock industry and closely related fields. The Animal Sciences major offers considerable flexibility in fulfilling specific career objectives, whether you are interested in working directly with livestock or indirectly in closely related areas such as agribusiness, research, government, or education.

### **Graduation Requirements**

To earn the Bachelor of Science in Animal Sciences, the student must have a minimum of 120 credit hours with at least a 2.0 grade-point standing. A minimum of 45 credit hours must be from upper division courses (300 and above). Remedial courses may not be counted toward the total hours required for the degree. In addition to University Studies requirements, students must complete college, departmental and specialty support requirements.

### **Plan of Study**

As an animal sciences major you are required to develop an acceptable Plan of Study during your sophomore year for your junior and senior years. The plan must be signed by your advisor and returned to the Associate Dean for Instruction's office. If you are an upper division transfer student (from another university or from another UK college or department) then you will submit your plan during the first semester you are enrolled in the program. Consult your academic advisor in developing your Plan of Study.

Each student must complete the following:

#### **College Required Hours**

	Hours
*GEN 100 Issues in Agriculture: The Development of Modern Agriculture	3
<b>Subtotal: College Required Hours</b>	<b>3</b>

#### **University Studies Requirements**

See "University Studies Program" on pages 75-79 for the complete University Studies requirements. The courses listed below are (a) recommended by the college, or (b) required courses that also fulfill University Studies areas. Students should work closely with their advisor to complete the University Studies Program requirements.

	Hours
<b>Inference-Logic</b>	
MA 123 Elementary Calculus and Its Applications	3 or
MA 113 Calculus I	4
<b>Natural Sciences</b>	
CHE 105 General College Chemistry I	3
CHE 107 General College Chemistry II	3
<b>USP Electives</b>	
BIO 150 Principles of Biology I	3
BIO 152 Principles of Biology II	3



## Premajor Requirements

Courses marked with an asterisk (\*) may also be used to satisfy University Studies requirements.  
Courses marked with a double asterisk (\*\*) satisfies the Graduation Writing Requirement.

	Hours
*MA 123 Elementary Calculus and Its Applications	3 OR
*MA 113 Calculus I	4
*BIO 150 Principles of Biology I	3
*BIO 152 Principles of Biology II	3
*CHE 105 General College Chemistry I	3
*CHE 107 General College Chemistry II	3
*CHE 111 General College Laboratory I	2
*CHE 113 General College Chemistry II	1
**ENG 203W Business Writing	3
<b>Subtotal: Premajor Hours</b>	<b>21-22</b>

## Major Requirements

	Hours
ASC 101 Biology of Domestic Animals	3
ASC 102 Applications of Animal Sciences	3
ASC 205 Livestock, People, and Interactions	1
ASC 325 Physiology of Domestic Animals	3
ASC 362 Animal Genetics	4
ASC 364 Animal Reproduction	4
ASC 378 Animal Nutrition	4
ASC 470 Capstone for Animal Agriculture	3

and at least three from the following:

ASC 340 Poultry Production	2
ASC 406 Beef Science	4
ASC 404G Small Ruminant Science	4
ASC 408G Swine Science	2
ASC 410G Equine Science	3
ASC 420G Dairy Science	3

**Subtotal: Major Hours** **32-36**

In addition to the Major Requirements, students choose one of three options:

**Option A: Animal Industry**

Students fulfilling the Major Requirements are eligible for the Animal Industry Option by taking certain required Specialty Support Courses (see below). In addition, students with more specific interests may, but are not required to, choose from three specializations available within this Option.

	Hours
<b>No specialization</b> (required Specialty Support only; see below)	0
<b>Livestock Specialization</b>	
ASC 300 Meat Science	4

And at least two from this list (hours count in major core requirement):

ASC 340 Poultry Production  
ASC 406 Beef Science  
ASC 404G Small Ruminant Science  
ASC 408G Swine Science

**Equine Specialization**

ASC 310 Equine Anatomy and Conformation	2
ASC 320 Equine Management	3
ASC 410G Equine Science (hours count in major core requirements)	

**Dairy Specialization**

ASC 420G Dairy Science (hours count in major core requirements)	
ASC 564 Lactation	3

**Subtotal: Option A Hours** 0-5

**Option B: Food Industry**

Students fulfilling the Major Requirements are eligible for the Food Industry Option by taking certain required Specialty Support Courses (see below) and:

	Hours
ASC 300 Meat Science	4
FSC 107 Introduction to Food Science	3
<b>Subtotal: Option B Hours</b>	<b>7</b>

### Option C: Pre-Professional

Students fulfilling the Major Requirements are eligible for the Pre-Professional Option by taking certain required Specialty Support Courses (see below).

#### Specialty Support

##### *Animal Industry Option*

CHE 230 Organic Chemistry I

or

CHE 236 Survey of Organic Chemistry

Hours

3

Depending on the student's area of interest and subject to the advisor's approval, additional courses at the 200-level or above may be selected from biochemistry, biology, chemistry, physics, statistics, or any agricultural related area other than Animal Sciences

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##### *Food Industry Option*

CHE 230 Organic Chemistry I

or

CHE 236 Survey of Organic Chemistry

3

FSC 304 Animal Derived Foods

3

Depending on the student's area of interest and subject to the advisor's approval, additional courses at the 200-level or above may be selected from biochemistry, biology, chemistry, physics, statistics, or any agricultural related area other than Animal Sciences

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##### *Pre-Professional Option*

ABT/ENT 360 Genetics

or

BIO 304 Principles of Genetics

3-4

CHE 230/231 Organic Chemistry I

5

CHE 232/233 Organic Chemistry II

5

PHY 211 Physics I

5

PHY 213 Physics II

5

**Subtotal: Specialty Support**

**18 to 24**

#### **Electives**

Electives should be selected to complete the 120 hours required for graduation.

**Subtotal: Electives**

**minimum of 17**

**TOTAL HOURS:**

**120**

### Breakdown of hours for each Option in Animal Science Curriculum

	Animal Industry	Food Industry	Preprof
USP (includes only those hours not in pre-major and assumes no Math 109)	19	19	19
College	3	3	3
Premajor	21-22	21-22	21-22
Major	32-36	32-36	32-36
Option (hrs beyond the 3 Prod Elec)	0-5	7	0
SS (assumes 18 hrs except PP)	18	18	24
<b>Subtotal</b>	<b>93-103</b>	<b>97-102</b>	<b>99-104</b>
<b>Total Electives</b>	<b>17-27</b>	<b>18-23</b>	<b>16-21</b>
<b>Total Hours</b>	<b>120</b>	<b>120</b>	<b>120</b>