



## SECTION V: Proposed Changes to an Existing Program or Program Policies

Insert here a statement of the exact changes to be made: The Department of Animal Science is modifying the ANSCBS degree program to offer students 3 possible areas of concentration

Check if either of these boxes apply and provide the necessary signature:

- Program change proposal adds courses offered by another academic college, and that college dean's office has been notified. The signature of the dean of that academic college is required here: \_\_\_\_\_
- Program change proposal deletes courses offered by another academic college, and that college dean's office has been notified. The signature of the dean of that academic college is required here: \_\_\_\_\_

Check all the boxes that apply and complete the required sections of the form:

- Change of Name and Code (Complete only sections I, II, V and VII.)
- Change Course Requirements: (Complete all sections of the form except "Proposed Name" in II, section III, and section IV.)
- Change Delivery Site/Method (Complete all sections of the form except "Proposed Name" in II, section III, and section IV.)
- Change Total Hours (Complete all sections of the form except "Proposed Name" in II, section III, and section IV.)
- Change in Program Policies

## SECTION VI: Justification

*Justify this change and state its likely effect on any other degree program (including those outside the school or college). Identify any program or program components (other than courses) to be eliminated if this program is implemented. (Program and course change forms must also be submitted for such related changes.)*

**The changes proposed have been brought forward and approved by the faculty of the Department of Animal Science. These changes will allow students flexibility in meeting educational and career goals and will present a clearer path for students to follow through the degree program. The availability of the three concentrations will also improve and simplify student advising.**

## SECTION VII: Catalog Text and Format

*In the box below, insert the current catalog text which is to be changed, with changes highlighted with the color yellow. Include all proposed changes identified in Section V. Only changes explicitly stated in Section V will be considered for approval by the University Course and Programs Committee, the Graduate Council and the Faculty Senate. If you are proposing a new program, give proposed text with all of the elements listed below. If you are proposing modified text, include these elements as appropriate.*

**Include the following elements, in order, in the catalog text for proposed undergraduate program(s) or program changes:**

- State complete major/program name
- Briefly define or describe the major/program or discipline.
- Identify typical career goals or paths for graduates. (Optional)
- State admission requirements (if any) for entry or entry into upper/advanced level of major/program.
- Identify location in catalog of university, college/school, and department/program requirements which the student must meet in addition to hours in the major, but do not restate these requirements.
- State course requirements in the major and any allied areas, giving number of hours and specific courses; specify electives or elective areas and give numbers of hours and courses in elective pools or categories; identify any other course requirements.
- State any other requirements (required GPA, internship, exit exam, project, thesis, etc.).
- Identify name and requirements for each concentration (if any).
- Specify whether a minor or other program component is allowed or required and provide details.
- State eight-semester plan requirements

**For minors, state requirements in terms of hours, required courses, electives, etc.**

**For graduate program/units, include elements (as needed) parallel to those listed for undergraduate programs above.**

**For Law School program/units, prepare text consistent with current catalog style.**

**For centers, prepare text consistent with current catalog style.**

The animal science major offers three areas of concentration ~~is~~ designed to provide the scientific and technical education to prepare students for positions of leadership and responsibility. Students gain valuable experience pertaining to the production of beef and dairy cattle, swine, horses, sheep, and companion animals. In addition, extensive study is offered in the specialized areas of animal health, breeding and genetics, meat science, nutrition, and physiology.

Students majoring in animal science are prepared for a variety of careers. Pre-veterinary, pre-medical, and pre-professional course requirements may be fulfilled while meeting degree requirements. Specific career opportunities include positions and services related to the production, merchandising, processing and distribution of meat, milk, and related products. Additional opportunities include field persons, farm and herd managers, and other agribusiness-related positions. With additional academic training, animal science majors may become extension livestock specialists, nutritionists, geneticists, and physiologists.

The General Animal Science Concentration is a science-based degree program designed for students desiring a broader general background in animal science and offers students the greatest degree of flexibility in adapting their degree program to a wide variety of career paths. It offers a larger list of elective classes and opportunity the minors in other disciplines.

The Pre-Professional/Science Concentration is designed primarily for students who intend to compete for admission to professional schools, advanced post-graduate degree programs, or other career paths that require a strong background and understanding of basic and applied sciences.

The Equine Concentration is designed for students who desire a sound science based background in Animal Science, but desire a more intense study of equine management and equine science.

Students should consult an animal science adviser for specific course selections in the elective areas. With appropriate advising, students have an opportunity to complete at least one minor within the 120-hour degree program.

#### Requirements for a Major in Animal Science (ANSC) General Animal Science Concentration

State minimum core and discipline specific general education requirements:

(Course work that meets state minimum core requirements is in bold.)

##### Communications (6-12 hours)

- \_\_\_ Choose from **English Core** courses (6 hours)
- \_\_\_ Communication Intensive Elective (6 hours from approved list.)

##### History or Government (3 hours)

- \_\_\_ Choose from **U.S. History or Government Core** courses

##### Mathematics (3 hours)

- \_\_\_ Choose from **MATH Core** courses

##### Sciences (16 hours)

- \_\_\_ **BIOL 1543/1541L** Principles of Biology and lab
- \_\_\_ BIOL 2013/2011L General Microbiology and lab
- \_\_\_ **CHEM 1073/1071L** Fundamentals of Chemistry and lab or
- \_\_\_ **CHEM 1123/1121L** University Chemistry II and lab
- \_\_\_ CHEM 2613/2611L Organic Physiological Chemistry and lab or
- \_\_\_ CHEM 3603/3601L Organic Chemistry I and lab

##### Fine Arts and Humanities (6 hours)

- \_\_\_ Choose from **Fine Arts, Humanities Core** courses

##### Social Sciences (9 hours)

- \_\_\_ Choose from **Social Sciences Core** courses

##### ANSC Requirements (24~~2~~ hours)

- \_\_\_ ANSC 1001L Introductory Animal Sciences Laboratory
- \_\_\_ ANSC 1032 Introductory Animal Sciences
- \_\_\_ ANSC 1041 Introduction to Companion Animal Industry or
- ANSC 1051 Introduction to the Livestock Industry
- \_\_\_ ANSC 2252L Introduction to Livestock and Meat Evaluation
- \_\_\_ ANSC 2781 Career Preparation and Development
- \_\_\_ ANSC 3133 Animal Breeding and Genetics
- \_\_\_ ANSC 3143 Principles of Animal Nutrition
- \_\_\_ ANSC 3433 Fundamentals of Reproductive Physiology
- \_\_\_ ANSC 4142 Advanced Animal Handling Techniques

Choose 6 hours from the following:

- \_\_\_ ANSC 4252 Cow-Calf Management
- \_\_\_ ANSC 4262 Swine Production
- \_\_\_ ANSC 4272 Sheep Production
- \_\_\_ ANSC 4283 Horse Production
- \_\_\_ ANSC 4452 Milk Production
- \_\_\_ ANSC 4482 Companion Animal Management
- \_\_\_ ANSC 4652 Stocker-Feedlot Cattle Management

##### Animal Science Electives (Choose 13 hours):

- \_\_\_ ANSC 3003 Applied Animal Parasitology
- \_\_\_ ANSC 3013 Parasitisms of Domesticated Non-Herbivores
- \_\_\_ ANSC 3032 Animal Physiology I
- \_\_\_ ANSC 3042 Animal Physiology II

- \_\_ ANSC 3123 Principles of Genetics
- \_\_ ANSC 3152/3151L Applied Animal Nutrition and lab
- \_\_ ANSC 3333 Diseases of Livestock
- ANSC 3072 Equine Selection and Evaluation
- ANSC 4072 Advanced Equine Selection and Evaluation
- ANSC 4173 The Thoroughbred Horse Industry
- ANSC 3491L Artificial Insemination in Cattle
- \_\_ ANSC 3613 Meat Science
- \_\_ ANSC 4303 Comparative Veterinary Anatomy

Discipline-related Electives (Choose 16 hours)

- \_\_ ANSC 2003 \_\_ ANSC 2213 \_\_ ANSC 2304
- \_\_ ANSC 3282 \_\_ ANSC 3291 \_\_ ANSC 3723
- \_\_ ANSC 3822 \_\_ ANSC 400V \_\_ ANSC 401V
- \_\_ ANSC 410V \_\_ ANSC 4291 \_\_ AGEC 1103 AFLS 400VH (1- 6 hrs)
- \_\_ AGEC 2103 \_\_ AGEC 2303 \_\_ AGME 2903
- \_\_ BIOL 1601L \_\_ BIOL 1603 \_\_ BIOL 2531L
- \_\_ BIOL 2533 \_\_ CSES 1203 \_\_ CSES 2013
- \_\_ CHEM 1101L \_\_ CHEM 1103 \_\_ CHEM 1121L
- \_\_ CHEM 1123 \_\_ CHEM 2261L \_\_ CHEM 2263
- \_\_ FDSC 2503 \_\_ PHYS 2011L \_\_ PHYS 2013
- \_\_ PHYS 2031L \_\_ PHYS 2033 \_\_ POSC 2353
- \_\_ POSC 3554 \_\_ WCOB 1012 \_\_ WCOB 1023 Math 1213 or higher

Or any upper division course in AEED, AGEC, AGME, AGST, BIOL, CHEM, CSES, FDSC, POSC, or WCOB.

General Electives (~~1820~~-246 hours)

**120 Total Hours**

Requirements for a Major in Animal Science (ANSC) Pre-Professional/Science Concentration

State minimum core and discipline specific general education requirements:

(Course work that meets state minimum core requirements is in bold.)

Communications (~~6~~-12 hours)

\_\_ Choose from **English Core** courses (6 hours)

COMM 1313

\_\_ Communication Intensive Elective (~~6~~3 hours from approved list.)

History or Government (3 hours)

\_\_ Choose from **U.S. History or Government Core** courses

Mathematics (3 hours)

~~Choose from~~ **MATH 1213 Core courses**

Sciences (~~+6~~8 hours)

\_\_ **BIOL 1543/1541L** Principles of Biology and lab

~~\_\_ BIOL 2013/2011L General Microbiology and lab~~

~~\_\_ CHEM 1073/1071L Fundamentals of Chemistry and lab or~~

~~\_\_ CHEM 1123/1121L University Chemistry II and lab~~

~~\_\_ CHEM 2613/2611L Organic Physiological Chemistry and lab or~~

~~\_\_ CHEM 3603/3601L Organic Chemistry I and lab~~

Fine Arts and Humanities (6 hours)

\_\_ Choose from **Fine Arts, Humanities Core** courses

Social Sciences (9 hours)

\_\_ Choose from **Social Sciences Core** courses

ANSC Requirements (~~22~~22 hours)

\_\_ ANSC 1001L Introductory Animal Sciences Laboratory

\_\_ ANSC 1032 Introductory Animal Sciences

\_\_ ANSC 1041 Introduction to Companion Animal Industry or

ANSC 1051 Introduction to the Livestock Industry

\_\_ ANSC 2252L Introduction to Livestock and Meat Evaluation

\_\_ ANSC 2781 Career Preparation and Development

~~\_\_ ANSC 3133 Animal Breeding and Genetics~~

ANSC 3123 Principles of Genetics

\_\_ ANSC 3143 Principles of Animal Nutrition

\_\_ ANSC 3433 Fundamentals of Reproductive Physiology

ANSC 4142 Advanced Animal Handling Techniques

Choose ~~46~~ hours from the following:

- ANSC 4252 Cow-Calf Management
- ANSC 4262 Swine Production
- ANSC 4272 Sheep Production
- ANSC 4283 Horse Production
- ANSC 4452 Milk Production
- ANSC 4482 Companion Animal Management
- ANSC 4652 Stocker-Feedlot Cattle Management

Animal Science Electives (Choose ~~136~~ hours):

- ANSC 3003 Applied Animal Parasitology
- ANSC 3013 Parasitisms of Domesticated Non-Herbivores
- ~~ANSC 3032 Animal Physiology I~~
- ~~ANSC 3042 Animal Physiology II~~
- ~~ANSC 3123 Principles of Genetics~~
- ANSC 3133 Animal Breeding and Genetics
- ANSC 3152/3151L Applied Animal Nutrition and lab
- ANSC 3333 Diseases of Livestock
- ANSC 3072 Equine Selection and Evaluation
- ANSC 4072 Advanced Equine Selection and Evaluation
- ANSC 4173 The Thoroughbred Horse Industry
- ANSC 3491L Artificial Insemination in Cattle
- ANSC 3613 Meat Science
- ANSC 4303 Comparative Veterinary Anatomy

Pre-Professional/Science Concentration (35 hrs)

- ANSC 3032 Animal Physiology I
- ANSC 3042 Animal Physiology II
- BIOL 1603/1601L Zoology and Lab
- BIOL 2013/2011L General Microbiology and lab
- CHEM 1103/1011L Univ Chem I and Lab
- PHYS 2013/2011L College Physics I and Lab
- PHYS 2033/2031L College Physics II and Lab
- CHEM 3603/3601L Organic Chemistry I and Lab
- CHEM 3613/3611L Organic Chemistry II and Lab
- CHEM 3813 Biochemistry

Discipline-related Electives (Choose ~~106~~ hours)

Suggested Pre-Professional/Science Electives:

- BIOL 2533 Cell Biology
- MATH 2554 Calculus I
- STAT 2023 Biostatistics or STAT 2303 Principles of Statistics

Other discipline related electives:

- ANSC 2003  ANSC 2213  ANSC 2304
- ANSC 3282  ANSC 3291  ANSC 3723
- ANSC 3822  ANSC 400V  ANSC 401V
- ANSC 410V  ANSC 4291  AGEC 1103  AFLS 400VH (1 – 6 hrs)
- AGEC 2103  AGEC 2303  AGME 2903
- ~~BIOL 1601L~~ ~~BIOL 1603~~  BIOL 2531L
- BIOL 2533  CSES 1203  CSES 2013
- CHEM 1101L ~~CHEM 1103~~  CHEM 1121L
- CHEM 1123  CHEM 2261L  CHEM 2263
- FDSC 2503 ~~PHYS 2011L~~ ~~PHYS 2013~~
- ~~PHYS 2031L~~ ~~PHYS 2033~~  POSC 2353
- POSC 3554  WCOB 1012  WCOB 1023

Or any upper division course in AEED, AGEC, AGME, AGST, BIOL, CHEM, CSES, FDSC, POSC, or WCOB.

General Electives (~~20-266~~ hours)

**120 Total Hours**

Requirements for a Major in Animal Science (ANSC) Equine Concentration  
State minimum core and discipline specific general education requirements:

(Course work that meets state minimum core requirements is in bold.)

Communications (6-12 hours)

- \_\_\_ Choose from **English Core** courses (6 hours)
- \_\_\_ Communication Intensive Elective (6 hours from approved list.)

History or Government (3 hours)

- \_\_\_ Choose from **U.S. History or Government Core** courses

Mathematics (3 hours)

- \_\_\_ Choose from **MATH Core** courses

Sciences (16 hours)

- \_\_\_ **BIOL 1543/1541L** Principles of Biology and lab
- \_\_\_ BIOL 2013/2011L General Microbiology and lab
- \_\_\_ **CHEM 1073/1071L** Fundamentals of Chemistry and lab or
- \_\_\_ **CHEM 1123/1121L** University Chemistry II and lab
- \_\_\_ CHEM 2613/2611L Organic Physiological Chemistry and lab or
- \_\_\_ CHEM 3603/3601L Organic Chemistry I and lab

Fine Arts and Humanities (6 hours)

- \_\_\_ Choose from **Fine Arts, Humanities Core** courses

Social Sciences (9 hours)

- \_\_\_ Choose from **Social Sciences Core** courses

ANSC Requirements (~~22~~ hours)

- \_\_\_ ANSC 1001L Introductory Animal Sciences Laboratory
- \_\_\_ ANSC 1032 Introductory Animal Sciences
- \_\_\_ ANSC 1041 Introduction to Companion Animal Industry or
- \_\_\_ ANSC 1051 Introduction to the Livestock Industry
- \_\_\_ ANSC 2252L Introduction to Livestock and Meat Evaluation
- \_\_\_ ANSC 2781 Career Preparation and Development
- \_\_\_ ANSC 3133 Animal Breeding and Genetics
- \_\_\_ ANSC 3143 Principles of Animal Nutrition
- \_\_\_ ANSC 3433 Fundamentals of Reproductive Physiology
- \_\_\_ ANSC 4142 Advanced Animal Handling Techniques

Choose ~~46~~ hours from the following:

- \_\_\_ ANSC 4252 Cow-Calf Management
- \_\_\_ ANSC 4262 Swine Production
- \_\_\_ ANSC 4272 Sheep Production
- \_\_\_ ~~ANSC 4283 Horse Production~~
- \_\_\_ ANSC 4452 Milk Production
- \_\_\_ ANSC 4482 Companion Animal Management
- \_\_\_ ANSC 4652 Stocker-Feedlot Cattle Management

Animal Science Electives (Choose 13 hours):

- \_\_\_ ANSC 3003 Applied Animal Parasitology
- \_\_\_ ANSC 3013 Parasitisms of Domesticated Non-Herbivores
- \_\_\_ ANSC 3032 Animal Physiology I
- \_\_\_ ANSC 3042 Animal Physiology II
- \_\_\_ ANSC 3123 Principles of Genetics
- \_\_\_ ANSC 3152/3151L Applied Animal Nutrition and lab
- \_\_\_ ANSC 3333 Diseases of Livestock
- \_\_\_ ANSC 3491L Artificial Insemination in Cattle
- \_\_\_ ANSC 4072 Advanced Equine Selection and Evaluation
- \_\_\_ ANSC 3613 Meat Science
- \_\_\_ ANSC 4303 Comparative Veterinary Anatomy

Equine Concentration: (14 hrs)

- \_\_\_ ANSC 2003 Intro to the Equine Industry
- \_\_\_ ANSC 3723 Horse & Livestock Merchandising
- \_\_\_ ANSC 3072 Equine Selection and Evaluation
- \_\_\_ ANSC 4173 The Thoroughbred Horse Industry
- \_\_\_ ANSC 4283 Horse Production

Discipline-related Electives (Choose ~~16~~ hours)

- \_\_\_ ~~ANSC 2003~~ \_\_\_ ANSC 2213 \_\_\_ ANSC 2304
- \_\_\_ ANSC 3282 \_\_\_ ANSC 3291 \_\_\_ ~~ANSC 3723~~
- \_\_\_ ANSC 3822 \_\_\_ ANSC 400V \_\_\_ ANSC 401V

\_\_ ANSC 410V \_\_ ANSC 4291 \_\_ AGECE 1103 AFLS 400VH (1 – 6 hrs  
\_\_ AGECE 2103 \_\_ AGECE 2303 \_\_ AGME 2903  
\_\_ BIOL 1601L \_\_ BIOL 1603 \_\_ BIOL 2531L  
\_\_ BIOL 2533 \_\_ CSES 1203 \_\_ CSES 2013  
\_\_ CHEM 1101L \_\_ CHEM 1103 \_\_ CHEM 1121L  
\_\_ CHEM 1123 \_\_ CHEM 2261L \_\_ CHEM 2263 MATH 1213 or higher  
\_\_ FDSC 2503 \_\_ PHYS 2011L \_\_ PHYS 2013  
\_\_ PHYS 2031L \_\_ PHYS 2033 \_\_ POSC 2353  
\_\_ POSC 3554 \_\_ WCOB 1012 \_\_ WCOB 1023

Or any upper division course in AEED, AGECE, AGME, AGST, BIOL,  
CHEM, CSES, FDSC, POSC, or WCOB.

General Electives (~~920-1526~~ hours)

**120 Total Hours**

**SECTION VIII: Action Recorded by Registrar's Office**

PROGRAM INVENTORY/DARS

PGRM \_\_\_\_\_ SUBJ \_\_\_\_\_ CIP \_\_\_\_\_ CRTS \_\_\_\_\_  
DGRE \_\_\_\_\_ PGCT \_\_\_\_\_ OFFC&CRTY VALID \_\_\_\_\_

REPORTING CODES

PROG. DEF. \_\_\_\_\_ REQ. DEF. \_\_\_\_\_  
Initials \_\_\_\_\_ Date \_\_\_\_\_

**Distribution**

Notification to:

- (1) College
- (2) Department
- (3) Admissions
- (4) Institutional Research
- (5) Continuing Education
- (6) Graduate School
- (7) Treasurer
- (8) Undergraduate Program Committee

8/19/13