

## Animal Sciences

Options:

- Animal Production,
- Dairy Production, and
- Equine Production

**Bachelor of Science in Animal Sciences**

Effective: July 1, 2002

Animal Sciences involves studying and applying the basic principles of nutrition, reproduction, and genetics to the production and management of horses, dairy and beef cattle, sheep, swine, and poultry.

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*As a major, you will have the opportunity to pursue specific interests by selecting one of three options:*

- **Option 1: Animal Production**—Emphasizes the application of science to production of various livestock species (sheep, beef cattle, swine) and poultry.
- **Option 2: Dairy Production**—Emphasizes the application of science to production and management of dairy cattle.
- **Option 3: Equine Production**—Emphasizes the application of science to production and management of the equine species.

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No one program fits all Animal Sciences students. Both men and women study Animal Sciences, and they come from varied backgrounds. 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.

Animal Sciences majors are advised by faculty members who give them personal attention. The curriculum is tailored to your interests and career goals. Additionally, you can sharpen your leadership and communication skills by participating in one of the department-sponsored clubs and judging teams. Also, part-time and summer employment provides many students with an opportunity to gain valuable experience.

### Career Opportunities

The animal industry contributes greatly to the economy of the Commonwealth of Kentucky and to the United States. No matter what livestock 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.

Animal Sciences graduates are prepared to:

- pursue careers in the large and multifaceted agribusiness sector,
- further their scientific interests with a career in research, veterinary medicine, or education, or
- work directly in beef or dairy cattle, sheep, swine, poultry, or horse production and management.

### Graduation Requirements

To earn a Bachelor of Science in Animal Sciences—Animal Production Option, Dairy Production Option, or Equine Production Option—you must complete 128 semester hours with at least 48 hours from courses at the 300 level and above. A 2.0 grade point standing (on a 4.0 scale) is necessary, and remedial courses cannot be counted toward the total hours required for the degree. In addition to University Studies Program requirements, you must satisfy college, departmental, and specialty support requirements.

### University Studies Program (USP) Requirements

Courses listed in the University Studies outline may also satisfy college, option, or specialty support requirements.

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#### I. Mathematics (3-4 hours)

*Completed by one of the following:*

1. A score  $\geq 26$  on mathematics section of ACT **or**
2. A bypass examination **or**
3. MA 109 *College Algebra* **or**
4. Any calculus course (also satisfies Inference-Logic requirement).

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## II. Foreign Language (0-8 hours)

Completed by one of the following:

1. Two years of the same foreign language in high school or
  2. Two semesters of the same foreign language in college.
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## III. Inference-Logic (3-5 hours)

Satisfied by the following pre-major requirement:

MA 123—Elementary Calculus & Its Applications or  
MA 113—Calculus I

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## IV. Written Communications (3-6 hours)

Completed by one of the following:

1. ENG 101/102—Writing I and II (6 hours) or
  2. Students who score  $\geq 29$  on the English section of the ACT and who pass an English proficiency examination may satisfy the University Writing requirement by passing ENG 105 Writing: An Accelerated Course (3 hours).
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## V. Oral Communication

Students who begin their first academic year in the College of Agriculture will satisfy this requirement by completing GEN 100 and GEN 200 (required under College Requirements.)

Students who transfer into the College of Agriculture after completing 30 hours take GEN 200 and 3 hours from the approved list under the communications requirement in the UK Bulletin or schedule book.

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## VI. Natural Sciences (9 hours)

Satisfied by the following pre-major requirement:

CHE 105—General College Chemistry I  
CHE 107—General College Chemistry II  
CHE 115—General College Chemistry Laboratory

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## VII. Social Sciences (6 hours)

Six hours from the USP-approved list.

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## VIII. Humanities (6 hours)

Six hours from the USP-approved list.

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## IX. Cross-Cultural Requirement (3 hours)

Three hours from the USP-approved list.

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## X. USP-Required Electives (6 hours)

Satisfied by the following pre-major requirement:

BIO 150—Principles of Biology I  
BIO 152—Principles of Biology II

## College Requirements: 6-9 hours

### A. General Requirements:

GEN 100—Issues in Agriculture: The Development of Modern Agriculture\* and

GEN 200—Issues in Agriculture: Contemporary Problems in Agriculture\*

\*If you transfer into the College of Agriculture after completing your first academic year in another UK major or at another university, you are required to take only GEN 200.

### B. Business or Technical Writing

ENG 203—Writing for Business and Industry or

ENG 204—Technical Writing

### C. Complete a proposed plan of study for third-fourth year.

## Pre-Major Requirements:

MA 123—Elementary Calculus\* ..... 3

CHE 105—General College Chemistry I\* ..... 3

CHE 107—General College Chemistry II\* ..... 3

CHE 115—General Chemistry Laboratory ..... 3

BIO 150—Principles of Biology I\* ..... 3

BIO 152—Principles of Biology II\* ..... 3

\*May be used to satisfy University Studies Requirements

## Departmental Requirements:

### Core Requirements: 19 hours

ASC 106—Introduction to Animal Science ..... 3

ASC 120—Introductory Animal Science Laboratory ..... 1

ASC 362—Animal Breeding ..... 3

ASC 364—Reproductive Physiology of Farm Animals ..... 3

ASC 378—Animal Nutrition ..... 3

ASC 380—Feeds and Feeding ..... 3

ASC 470—Capstone for Animal Agriculture ..... 3

### Additional required courses for the Animal Production Option: (7-8 hours)

ASC 300—Meat Science ..... 4

Plus one of the following courses:

ASC 404G—Sheep Science ..... 4

ASC 406—Beef Cattle Science ..... 4

ASC 408G—Swine Science ..... 3

ASC 410G—Equine Science ..... 3

ASC 420G—Dairy Cattle Science ..... 3

### Additional required courses for the Dairy Production Option: (6 hours)

ASC 420G—Dairy Cattle Science ..... 3

ASC 564—Milk Secretion ..... 3

**Additional required courses for the Equine Production Option: (8 hours)**

ASC 310—Equine Anatomy and Conformation .....	2
ASC 320—Equine Management .....	3
ASC 410G—Equine Science .....	3

**Specialty Support Requirements: 21 hours**

**A. Required:**

ASC/ABT/ENT 360—Genetics .....	3
CHE 230—Organic Chemistry .....	3 or
CHE 236—Survey of Organic Chemistry .....	3

Depending on the student’s area of interest and subject to his/her academic advisor’s approval, an additional 15 hours of courses at the 200 level or above may be selected from chemistry, physics, biology, biochemistry, statistics, or any agricultural area other than Animal Sciences.

**Electives**

Electives should be selected to complete the 128 semester hours required for graduation.

**Suggested Schedule**

If you enroll at UK during your first semester, you may follow this suggested schedule. Use this schedule only as a guide, since schedules will vary if you have previously attended another college, you have earned credit by examination or via a high school advanced placement course, or if you are not starting in the fall semester. Your faculty advisor will assist you in course selection and career planning.

This schedule assumes that you have completed the foreign language component of the University Studies Program (USP) in high school.

**First Year (All Options)**

*Fall Semester*

ASC 106—Introductory Animal Science .....	3
ASC 120—Animal Science Laboratory .....	1
ENG 101—Writing I .....	3
MA 109—College Algebra .....	3
CHE 105—General College Chemistry I .....	3
USP Social Science Elective .....	3

*Spring Semester*

MA 123—Elementary Calculus .....	3
CHE 107—General College Chemistry II .....	3
CHE 115—General Chemistry Laboratory .....	3
ENG 102—Writing II .....	3
GEN 100—Development of Modern Agriculture .....	3

**Second Year (All Options)**

*Fall Semester*

CHE 236—Survey of Organic Chemistry .....	3
BIO 150—Principles of Biology I .....	3
ENG 203—Business Writing .....	3
USP Social Science Elective .....	3
USP Humanities Elective .....	3
Free Elective .....	3

*Spring Semester*

BIO 152—Principles of Biology II .....	3
GEN 200—Contemporary Problems in Agriculture .....	3
USP Humanities Elective .....	3
USP Cross-Cultural Elective .....	3
Free Elective .....	3

**Third/Fourth Years  
Animal Production Option**

**Third Year**

*Fall Semester*

ASC 300—Meat Science .....	4
ASC/ABT/ENT 360—Genetics .....	3
ASC 364—Reproductive Physiology of Farm Animals .....	3
ASC 378—Animal Nutrition .....	3
Specialty Support Elective .....	3

*Spring Semester*

ASC 362—Animal Breeding .....	3
ASC 380—Feeds and Feeding .....	3
Specialty Support Electives .....	12

**Fourth Year**

*Fall Semester*

Senior Production Course Elective .....	3
ASC 470—Capstone for Animal Agriculture .....	3
Free Electives .....	9

*Spring Semester*

Free Electives .....	14
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**Third/Fourth Years  
Dairy Production Option**

**Third Year**

*Fall Semester*

ASC/ABT/ENT 360—Genetics .....	3
ASC 364—Reproductive Physiology of Farm Animals .....	3
ASC 378—Animal Nutrition .....	3
Specialty Support Electives .....	6

*Spring Semester*

ASC 362—Animal Breeding .....	3
ASC 380—Feeds and Feeding .....	3
Specialty Support Electives .....	6
Free Elective .....	4

**Fourth Year**

*Fall Semester*

ASC 420G—Dairy Cattle Science .....	3
ASC 470—Capstone for Animal Agriculture .....	3
Specialty Support Elective .....	3
Free Electives .....	9

*Spring Semester*

ASC 564—Milk Secretion .....	3
Free Electives .....	12

Third/Fourth Years

Equine Production Option

**Third Year**

*Fall Semester*

ASC/ABT/ENT 360—Genetics.....	3
ASC 364—Reproductive Physiology of Farm Animals....	3
ASC 378—Animal Nutrition .....	3
ASC 320—Equine Management .....	3
Specialty Support Electives .....	4

*Spring Semester*

ASC 310—Equine Anatomy and Conformation .....	2
ASC 362—Animal Breeding.....	3
ASC 380—Feeds and Feeding .....	3
Specialty Support Electives .....	6

**Fourth Year**

*Fall Semester*

ASC 470—Capstone for Animal Agriculture .....	3
Specialty Support Electives .....	5
Free Electives .....	9

*Spring Semester*

ASC 410G—Equine Science .....	3
Free Electives .....	14

For more information contact:

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