The Companion Animal and Equine Science concentration is designed for students intending to pursue a career in industries generally not associated with traditional meat animal or dairy production. Students will take courses that prepare them for careers in specialized fields of animal care, animal health and animal well-being associated with zoos, kennels, research laboratories, and the racing industry.

**Degree Title:** Bachelor of Science in Animal Sciences

**Minimum Hours Required for Graduation:** 126 hours

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### General Education Requirements:

- [Link](https://courses.illinois.edu/gened/DEFAULT/DEFAULT)
- Composition I
- Advanced Composition
- Public Speaking
- Cultural Studies — Western
- Cultural Studies — Non-Western/U.S. Minority
- Foreign Language — 3 years in High School or 3rd level in College
- Calculus I — MATH 220, 221, or 234
- Statistics — STAT 100 (ask advisor for alternatives)
- **Humanities and the Arts — 2 courses**
- **Natural Sciences and Technology — all listed below**
  - CHEM 102 and 103
  - CHEM 104 and 105
  - MCB 100 and 101
- **Social and Behavioral Sciences**
  - Microeconomics—ACE 100 or ECON 102
  - One other Social and Behavioral Sciences Course (cannot be an Economics course)

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### College and Animal Sciences Requirements:

- ACES 101 or ACES 200—ACES Orientation
- ANSC 100 – Intro to Animal Sciences
- ANSC 101 – Contemporary Animal Issues
- ANSC 103 – Working with Farm Animals
- ANSC 221 – Cells, Metabolism and Genetics
- ANSC 222 – Anatomy and Physiology
- **ANSC 223 – Animal Nutrition**
- **ANSC 224 – Animal Reproduction & Growth**
- **ANSC 298 – Undergraduate Seminar**
- **ANSC 398 – Undergraduate Experiential Learning**
- **ANSC 498 – Integrating Animal Sciences**

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### Companion Animal and Equine Sciences Concentration Requirements (Course Titles Located on Back)

**Choose 1 Combination:**

- ANSC 250 and ANSC 307 or ANSC 206 and ANSC 306

**Choose 2 Applied Science Courses:**

- ANSC 201
- ANSC 204
- ANSC 205
- ANSC 211
- ANSC 219
- ANSC 301
- ANSC 305
- ANSC 309

- ANSC 310
- ANSC 312
- ANSC 313
- ANSC 314
- ANSC 322
- ANSC 370
- ANSC 400
- ANSC 401

- ANSC 402
- ANSC 403
- ANSC 404
- ANSC 405
- ANSC 407
- ANSC 424
- ANSC 435
- ANSC 437

- ANSC 471

**Choose 2 Basic Science Courses:**

- ANSC 331
- ANSC 350
- ANSC 363
- ANSC 366
- ANSC 406
- ANSC 409
- ANSC 420
- ANSC 421
- ANSC 422
- ANSC 431

- ANSC 332
- ANSC 338
- ANSC 438
- ANSC 440
- ANSC 441
- ANSC 444
- ANSC 447
- ANSC 448
- ANSC 449
- ANSC 450

- ANSC 451
- ANSC 452
- ANSC 453
- ANSC 454
- ANSC 455
- ANSC 456
- ANSC 457
- ANSC 458
- ANSC 459
- ANSC 523

- ANSC 524
- ANSC 525
- ANSC 526
- ANSC 530
- ANSC 533
- ANSC 541
- ANSC 542
- ANSC 543
- ANSC 545
- ANSC 554
- ANSC 561

*500-level courses are intended for James Scholars and graduate students. If you wish to take one of these courses, you should contact the instructor directly prior to enrolling.

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### Electives

In addition to the requirements above, you will need to take a certain number of electives that will help you reach the 126 credit hours that are needed to graduate. Students may wish to pursue a minor or take courses in a subject they have a strong interest.

A large majority of our students wish to enter Veterinary School after their bachelor’s degree. The following courses will be needed to enter Vet School here at the University of Illinois:

- **CHEM 232 & 233 — Organic Chemistry with Lab**
- **MCB 450 — Biochemistry**
- **PHYS 101 & 102 — Physics I and II**
- **Biology with Lab — IB 150/151, MCB 150/151, or IB 104**

If you wish to pursue Veterinary School, it is important you research the requirements of the vet school(s) you wish to attend. The above list does not encompass the requirements at every school.
Choose 1 Companion Animal & Equine Sciences Concentration:
- ANSC 206 — Horse Management and ANSC 306 — Equine Science OR

Choose 2 Basic Science Courses:
- ANSC 311 — Biology of Reproduction
- ANSC 350 — Cellular Metabolism in Animals
- ANSC 363 — Behavior of Domestic Animals
- ANSC 366 — Animal Behavior
- ANSC 406 — Zoo Animal Conservation Science
- ANSC 409 — Meat Science
- ANSC 420 — Ruminant Nutrition
- ANSC 421 — Minerals and Vitamins
- ANSC 422 — Companion Animal Nutrition
- ANSC 431 — Advanced Reproductive Biology
- ANSC 438 — Lactation Biology
- ANSC 441 — Human Genetics

Choose 2 Applied Science Courses:
- ANSC 201 — Principles of Dairy Production
- ANSC 204 — Intro Dairy Cattle Evaluation
- ANSC 205 — World Animal Resources
- ANSC 211 — Breeding Animal Evaluation
- ANSC 219 — Meat Technology
- ANSC 301 — Food Animal Prod., Mgmt, & Eval
- ANSC 305 — Human Animal Interactions
- ANSC 309 — Meat Production and Marketing

*Course offerings vary from semester to semester. For current semester offerings, please visit [https://courses.illinois.edu/](https://courses.illinois.edu/).
*500-level courses are intended for James Scholars and graduate students. If you wish to take one of these courses, you should contact the instructor directly prior to enrolling.

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**Sample 8-Semester Plan**

### Freshman Fall Semester
- ACES 101 2
- ANSC 100 4
- CMN 101/111 or RHET 105 3-4
- CHEM 102 & CHEM 103 4
- Gen Eds or electivesb 3
- **TOTAL FOR SEMESTER 16-17**

### Freshman Spring Semester
- ANSC 101 3
- CMN 101/112 or RHET 105 3-4
- CHEM 104 & CHEM 105 4
- MATH 234, 220, or 221 4-5
- Gen Eds or electivesb 3
- **TOTAL FOR SEMESTER 17-18**

### Sophomore Fall Semester
- ANSC 221 3
- ANSC 222 3
- ANSC 103a 2
- Gen Eds or electivesb 7
- **TOTAL FOR SEMESTER 15**

### Sophomore Spring Semester
- ANSC 223 3
- ANSC 224 3
- ANSC 298a 1
- Gen Eds or electivesb 7
- **TOTAL FOR SEMESTER 15**

### Junior Fall Semester
- Major/Concentration required 3
- Gen Eds or electivesb 13
- **TOTAL FOR SEMESTER 16**

### Junior Spring Semester
- ANSC 498c 2
- Major/Concentration required 6
- Gen Eds or electivesb 9
- **TOTAL FOR SEMESTER 17**

### Senior Fall Semester
- ANSC 498c 2
- Major/Concentration required 6
- Gen Eds or electivesb 9
- **TOTAL FOR SEMESTER 17**

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Want to learn more about Animal Sciences? Visit [www.ansc.illinois.edu](http://www.ansc.illinois.edu)!