



The Companion Animal and Equine Science concentration is designed for students intending to pursue a career in those 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

General Education Requirements: courses.illinois.edu/gened/DEFAULT/DEFAULT

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

College and Animal Sciences Requirements:

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

COMPANION ANIMAL & EQUINE SCIENCES CONCENTRATION REQUIREMENTS (COURSE TITLES LOCATED ON BACK):

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| Choose 1 Combination: | Choose 2 Applied Science Courses: | Choose 2 Basic Science Courses: |
| ANSC 250 and ANSC 307 or
ANSC 206 and ANSC 306 | ANSC 201 ANSC 310 ANSC 403
ANSC 204 ANSC 312 ANSC 404
ANSC 205 ANSC 313 ANSC 405
ANSC 211 ANSC 314 ANSC 406
ANSC 219 ANSC 322 ANSC 407
ANSC 301 ANSC 360 ANSC 424
ANSC 305 ANSC 370 ANSC 437
ANSC 309 ANSC 401 ANSC 470
ANSC 402 ANSC 471 | ANSC 251 ANSC 431 ANSC 451 ANSC 524
ANSC 350 ANSC 438 ANSC 452 ANSC 525
ANSC 363 ANSC 440 ANSC 454 ANSC 526
ANSC 366 ANSC 441 ANSC 460 ANSC 541
ANSC 406 ANSC 445 ANSC 509 ANSC 543
ANSC 409 ANSC 446 ANSC 520
ANSC 420 ANSC 448 ANSC 521
ANSC 421 ANSC 449 ANSC 522
ANSC 422 ANSC 450 ANSC 523 |

*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.

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:

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| CHEM 232 & 233 — Organic Chemistry with Lab | PHYS 101 & 102 — Physics I and II |
| MCB 450 — Biochemistry | 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.

COMPANION ANIMAL & EQUINE SCIENCES CONCENTRATION REQUIREMENTS:

Choose 1 Combination:

- ANSC 206 — Horse Management and ANSC 306 — Equine Science OR
- ANSC 250 — Companion Animals in Society and ANSC 307 — Companion Animal Management

Choose 2 Applied Science Courses:

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| ANSC 201 — Principles of Dairy Production | ANSC 312 — Advanced Livestock Evaluation | ANSC 403 — Pork Production |
| ANSC 204 — Intro Dairy Cattle Evaluation | ANSC 313 — Horse Appraisal | ANSC 404 — Poultry Science |
| ANSC 205 — World Animal Resources | ANSC 314 — Adv Dairy Cattle Evaluation | ANSC 405 — Advanced Dairy Management |
| ANSC 211 — Breeding Animal Evaluation | ANSC 322 — Livestock Feeds and Feeding | ANSC 407 — Animal Shelter Management |
| ANSC 219 — Meat Technology | ANSC 360----Technology & Management | ANSC 424 — Pet Food & Feed Manufacturing |
| ANSC 301 — Food Animal Prod., Mgmt. & Eval. | ANSC 370 — Companion Animal Policy | ANSC 435 — Milk Quality and Udder Health |
| ANSC 305 — Human Animal Interactions | ANSC 400 — Dairy Herd Management | ANSC 437 — Adv. Reproductive Management |
| ANSC 309 — Meat Production and Marketing | ANSC 401 — Beef Production | ANSC 470----Companion Animal Cruelty Inves |
| ANSC 310 — Meat Selection and Grading | ANSC 402 — Sheep Production | ANSC 471 — ANSC Leaders & Entrepreneurs |

Choose 2 Basic Science Courses:

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| ANSC 251 — Epidemics and Infectious Diseases | ANSC 438 — Lactation Biology | ANSC 454 ----Neuroimmunology |
| ANSC 350 — Cellular Metabolism in Animals | ANSC 440 — Applied Statistical Methods I | ANSC 460----The Secret Life of Animals: Tech |
| ANSC 363 — Behavior of Domestic Animals | ANSC 441 — Human Genetics | ANSC 509 — Muscle Biology |
| ANSC 366 — Animal Behavior | ANSC 445 — Statistical Methods | ANSC 520 — Protein and Energy Nutrition |
| ANSC 406 — Zoo Animal Conservation Science | ANSC 446 — Population Genetics | ANSC 521 — Regulation of Metabolism |
| ANSC 409 — Meat Science | ANSC 448 — Math Modeling in Life Sciences | ANSC 522 — Advanced Ruminant Nutrition |
| ANSC 420 — Ruminant Nutrition | ANSC 449 — Biological Modeling | ANSC 523 — Techniques in Animal Nutrition |
| ANSC 421 — Vitamins and Minerals | ANSC 450 — Comparative Immunobiology | ANSC 524 — Nonruminant Nutrition Concepts |
| ANSC 422 — Companion Animal Nutrition | ANSC 451 — Microbes and the Animal Industry | ANSC 525 — Topics in Nutrition Research |
| ANSC 431 — Advanced Reproductive Biology | ANSC 452 — Animal Growth and Development | ANSC 526 — Adv. Companion Animal Nutrit |

Course offerings Course offerings vary from semester to semester. For current semester offerings, please visit courses.illinois.edu/

To learn about focus areas and recommended courses, please visit ansc.illinois.edu/undergrads/curriculum

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Sample 8-Semester Plan:

Freshman Fall Semester		Freshman Spring Semester	
ACES 101	2	ANSC 101	3
ANSC 100	4	CMN 101/112 or RHET 105	3-4
CMN 111/101 or RHET 105	3-4	CHEM 104 & CHEM 105	4
CHEM 102 & CHEM 103	4	MATH 234, 220, or 221	4-5
Gen Eds or elective**	3	Gen Eds or electives**	3
TOTAL FOR SEMESTER	16-17	TOTAL FOR SEMESTER	17-18

Sophomore Fall Semester		Sophomore Spring Semester	
ANSC 221	3	ANSC 223	3
ANSC 222*	3	ANSC 224*	4
ANSC 103**	2	ANSC 298**	1
Gen Eds or electives	7	Gen Eds or electives	7
TOTAL FOR SEMESTER	15	TOTAL FOR SEMESTER	15

*ANSC 103 and ANSC 298 must be completed by the end of the Sophomore year. Each course may be taken in either the Fall or Spring semesters.

Junior Fall Semester		Junior Spring Semester	
Major/Concentration required	3	Major/Concentration required	6
Gen Eds or electives**	13	Gen Eds or electives**	9
TOTAL FOR SEMESTER	16	TOTAL FOR SEMESTER	15

**Students pursuing admission to a Veterinary Medicine Program should consider using their elective credits hours to meet expected course work of that program. Course suggestions for the UIUC Veterinary School are on the front of this sheet. Note, some Colleges of Veterinary Medicine also require a second semester of organic chemistry.

Senior Fall Semester		Senior Spring Semester	
ANSC 498***	2	ANSC 498***	2
Gen Eds or electives**	9	Major/Concentration required	6
Major/Concentration required	6	Gen Eds or electives**	9
TOTAL FOR SEMESTER	17	TOTAL FOR SEMESETER	17

***ANSC 498 should be taken during one semester in your senior year.