



The Science, Pre-Veterinary and Medical concentration is designed for students interested in graduate school or professional training after the undergraduate degree. It allows the student flexibility to choose courses that will satisfy most entrance requirements to post-graduate programs and emphasizes basic science courses. The concentration enables a student to complete all of the pre-veterinary science requirements while working toward their degree.

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 (<i>ask advisor for alternatives</i>) | Microeconomics — ACE 100 or ECON 102 |
| | One other Social and Behavioral Sciences Course (<i>cannot be an Economics course</i>) |

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 | |

SCIENCE, PRE-VET AND MEDICAL CONCENTRATION REQUIREMENTS (COURSE TITLES LOCATED ON BACK):

Choose 2 Applied Science Courses:

- ANSC 201 ANSC 305 ANSC 322 ANSC 407
 ANSC 204 ANSC 306 ANSC 370 ANSC 424
 ANSC 205 ANSC 307 ANSC 400 ANSC 435
 ANSC 206 ANSC 309 ANSC 401 ANSC 437
 ANSC 211 ANSC 310 ANSC 402 ANSC 471
 ANSC 219 ANSC 312 ANSC 403
 ANSC 250 ANSC 313 ANSC 404
 ANSC 301 ANSC 314 ANSC 405

Choose 2 Basic Science Courses:

- ANSC 251 ANSC 431 ANSC 450 ANSC 524
 ANSC 350 ANSC 438 ANSC 451 ANSC 525
 ANSC 363 ANSC 440 ANSC 452 ANSC 526
 ANSC 366 ANSC 441 ANSC 509 ANSC 541
 ANSC 406 ANSC 445 ANSC 520 ANSC 543
 ANSC 409 ANSC 446 ANSC 521
 ANSC 420 ANSC 448 ANSC 522
 ANSC 422 ANSC 449 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.

SCIENCE, PRE-VET AND MEDICAL CONCENTRATION REQUIREMENTS:

Choose 2 Applied Science Courses:

ANSC 201 — Principles of Dairy Production	ANSC 306 — Equine Science	ANSC 400 — Dairy Herd Management
ANSC 204 — Intro Dairy Cattle Evaluation	ANSC 307 — Companion Animal Management	ANSC 401 — Beef Production
ANSC 205 — World Animal Resources	ANSC 309 — Meat Production and Marketing	ANSC 402 — Sheep Production
ANSC 206 — Horse Management	ANSC 310 — Meat Selection and Grading	ANSC 403 — Pork Production
ANSC 211 — Breeding Animal Evaluation	ANSC 312 — Advanced Livestock Evaluation	ANSC 404 — Poultry Science
ANSC 219 — Meat Technology	ANSC 313 — Horse Appraisal	ANSC 407 — Animal Shelter Management
ANSC 250 — Companion Animals in Society	ANSC 314 — Adv Dairy Cattle Evaluation	ANSC 424 — Pet Food & Feed Manufacturing
ANSC 301 — Food Animal Prod., Mgmt. & Eval.	ANSC 322 — Livestock Feeds and Feeding	ANSC 471 — ANSC Leaders and Entrepreneurs
ANSC 305 — Human Animal Interactions	ANSC 370 — Companion Animal Policy	

Choose 4 Basic Science Courses:

ANSC 251 — Epidemics and Infectious Diseases	ANSC 440 — Applied Statistical Methods I	ANSC 520 — Protein and Energy Nutrition
ANSC 350 — Cellular Metabolism in Animals	ANSC 441 — Human Genetics	ANSC 521 — Regulation of Metabolism
ANSC 363 — Behavior of Domestic Animals	ANSC 445 — Statistical Methods	ANSC 522 — Advanced Ruminant Nutrition
ANSC 366 — Animal Behavior	ANSC 446 — Population Genetics	ANSC 523 — Techniques in Animal Nutrition
ANSC 406 — Zoo Animal Conservation Science	ANSC 448 — Math Modeling in Life Sciences	ANSC 524 — Nonruminant Nutrition Concepts
ANSC 409 — Meat Science	ANSC 449 — Biological Modeling	ANSC 525 — Topics in Nutrition Research
ANSC 420 — Ruminant Nutrition	ANSC 450 — Comparative Immunobiology	ANSC 526 — Adv. Companion Animal Nutrition
ANSC 422 — Companion Animal Nutrition	ANSC 451 — Microbes and the Animal Industry	ANSC 541 — Regression Analysis
ANSC 431 — Advanced Reproductive Biology	ANSC 452 — Animal Growth and Development	ANSC 543 — Bioinformatics
ANSC 438 — Lactation Biology	ANSC 509 — Muscle Biology	

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

ACES 101	2
ANSC 100	4
CMN 111/101 or RHET 105	3-4
CHEM 102 & CHEM 103	4
Gen Eds or elective**	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 electives**	3
TOTAL FOR SEMESTER	17-18

Sophomore Fall Semester

ANSC 221	3
ANSC 222*	3
ANSC 103**	2
Gen Eds or electives	7
TOTAL FOR SEMESTER	15

Sophomore Spring Semester

ANSC 223	3
ANSC 224*	4
ANSC 298**	1
Gen Eds or electives	7
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

Major/Concentration required	3
Gen Eds or electives**	13
TOTAL FOR SEMESTER	16

Junior Spring Semester

Major/Concentration required	6
Gen Eds or electives**	9
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

ANSC 498***	2
Gen Eds or electives**	9
Major/Concentration required	6
TOTAL FOR SEMESTER	17

Senior Spring Semester

ANSC 498***	2
Major/Concentration required	6
Gen Eds or electives**	9
TOTAL FOR SEMESTER	17

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