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

**Composition I**
- Advanced Composition
- Public Speaking
- Cultural Studies (3 courses) — Western, Non-Western, and 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**
- Composition I
- Advanced Composition
- Public Speaking
- Cultural Studies (3 courses) — Western, Non-Western, and 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)

**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)

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 201 ANSC 305 ANSC 322 ANSC 405
- ANSC 204 ANSC 306 ANSC 360 ANSC 407
- ANSC 205 ANSC 307 ANSC 370 ANSC 424
- ANSC 206 ANSC 309 ANSC 400 ANSC 435
- ANSC 211 ANSC 310 ANSC 401 ANSC 437
- ANSC 219 ANSC 312 ANSC 402 ANSC 470
- ANSC 250 ANSC 313 ANSC 403 ANSC 471
- ANSC 301 ANSC 314 ANSC 404

*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:

- 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.
SCIENCE, PRE-VET AND MEDICAL CONCENTRATION REQUIREMENTS:

Choose 2 Applied Science Courses:

- ANSC 201 — Principles of Dairy Production
- ANSC 204 — Intro Dairy Cattle Evaluation
- ANSC 205 — World Animal Resources
- ANSC 206 — Horse Management
- ANSC 211 — Breeding Animal Evaluation
- ANSC 219 — Meat Technology
- ANSC 250 — Companion Animals in Society
- ANSC 301 — Food Animal Prod., Mgmt. & Eval.
- ANSC 305 — Human Animal Interactions

- ANSC 307 — Companion Animal Mngmnt
- ANSC 309 — Meat Production and Marketing
- ANSC 310 — Selection and Grading
- ANSC 312 — Advanced Livestock Evaluation
- ANSC 313 — Horse Appraiser
- ANSC 314 — Adv Dairy Cattle Evaluation
- ANSC 322 — Livestock Feeds and Feeding
- ANSC 360 — Technology & Management
- ANSC 370 — Companion Animal Policy

Choose 4 Basic Science Courses:

- ANSC 251 — Epidemics and Infectious Diseases
- 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 422 — Companion Animal Nutrition
- ANSC 431 — Advanced Reproductive Biology

- ANSC 438 — Lactation Biology
- ANSC 440 — Applied Statistical Methods I
- ANSC 441 — Human Genetics
- ANSC 445 — Statistical Methods
- ANSC 446 — Population Genetics
- ANSC 448 — Math Modeling in Life Sciences
- ANSC 449 — Biological Modeling
- ANSC 450 — Comparative Immunobiology
- ANSC 451 — Microbes and the Animal Industry
- ANSC 452 — Animal Growth & Development

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.

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

*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

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

Senior Fall Semester
Major/Concentration required  6
Gen Eds or electives**  9
TOTAL FOR SEMESTER 17

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

Want to learn more about Animal Sciences? Visit ansc.illinois.edu!