

Focus Areas, Updated 11/10/17

Beef Focus

Basic Science Courses:

ANSC 363 – Behavior of Domestic Animals
ANSC 409 – Meat Science
ANSC 420 – Ruminant Nutrition
ANSC 431 – Adv Repro Biology
ANSC 444 – Applied Animal Genetics
ANSC 452 – Animal Growth and Development
ANSC 467 – Applied Animal Ecology

Applied Science Courses:

ANSC 219 – Meat Technology
ANSC 301 – Food Animal Prod, Mgmt, & Eval
ANSC 309 – Meat Production and Marketing
ANSC 322 – Livestock Feeds and Feeding
ANSC 401 – Beef Production
ANSC 437 – Adv Reproductive Management
ANSC 471 – Leaders and Entrepreneurs

Other Courses to Consider:

ANSC 211 – Breeding Animal Evaluation (judging team)
ANSC 310 – Meat Selection and Grading (judging team)
ANSC 312 – Advanced Livestock Evaluation (judging team)

Behavior Focus

Basic Science Courses:

ANSC 366 – Animal Behavior
ANSC 363 – Behavior of Domestic Animals
ANSC 406 – Zoo Animal Conservation Science
ANSC 467 – Applied Animal Ecology

Other Courses to Consider:

ANTH/IB 437 – Primate Behav Endocrinology (offered infrequently)
IB 432 – Genes and Behavior
IB 467 – Principles of Systematics
IB 431 – Behavioral Ecology

Business and Management Focus

Minors to consider:

Business for Non-Business Majors
Food and Agribusiness Management
Leadership Studies

Companion Animals Focus

Basic Science Courses:

ANSC 363 – Behavior of Domestic Animals
ANSC 406 – Zoo Animal Conservation Science
ANSC 422 – Companion Animal Nutrition

Applied Science Courses:

ANSC 250 – Companion Animals in Society
ANSC 305 – Human-Animal Interactions
ANSC 307 – Companion Animal Management
ANSC 370 – Companion Animal Policy
ANSC 407 – Animal Shelter Management
ANSC 499 – Various Companion Animal Topics

Conservation Biology Focus

Basic Science Courses:

ANSC 366 – Animal Behavior
ANSC 406 – Zoo Animal Conservation Science
ANSC 446 – Population Genetics

Other courses to consider:

CPSC 452 – Evol Genetics and Genomics
IB 203 – Ecology
IB 439 – Conservation Biology
IB 451 – Biogeography
NRES 101 – Wildlife Conservation in the 21st Century
NRES 102 – Introduction to NRES
NRES 407 – Wildlife Population Ecology

Dairy Focus

Basic Science Courses:

ANSC 420 – Ruminant Nutrition
ANSC 438 – Lactation Biology

Applied Science Courses:

ANSC 201 – Principles of Dairy Production
ANSC 204 – Dairy Cattle Evaluation
ANSC 322 – Livestock Feeds and Feeding
ANSC 400 – Dairy Herd Management
ANSC 471 – Leaders and Entrepreneurs

Other courses to consider:

ANSC 314 – Adv Dairy Cattle Evaluation (judging team)
ANSC 398 – Dairy Challenge (section M in spring)

Equine Science Focus

Basic Science Courses:

ANSC 306 – Equine Science
ANSC 406 – Zoo Animal Conservation Science

Applied Science Courses:

ANSC 206 – Horse Management

Other courses to consider:

ANSC 256 – Horse's Role in Human History
ANSC 313 – Horse Appraisal (Judging Team)

Genetics Focus

Basic Science Courses:

ANSC 350 – Cellular Metabolism in Animals
ANSC 406 – Zoo Animal Conservation Science
ANSC 440 – Applied Statistical Methods I
ANSC 444 – Applied Animal Genetics
ANSC 445 – Statistical Methods
ANSC 446 – Population Genetics
ANSC 499, section B – Advanced Genetics & Genomics
ANSC 448 – Math Modeling in Life Sciences
ANSC 542 – Applied Bioinformatics
ANSC 545 – Statistical Genomics

Other courses to consider:

CPSC 261 – Biotechnology in Agriculture
CPSC 265 – Genetics Engineering Lab
CPSC 452 – Evol Genetics and Genomics
CPSC 563 – Chromosomes
CPSC 564 – Molecular Marker Data Analyses
MCB 450 – Introductory Biochemistry
IB 432 – Genes and Behavior

Meat Science Focus

Basic Science Courses:

ANSC 409 – Meat Science
ANSC 452 – Growth and Development
ANSC 509 – Muscle Biology

Applied Science Courses:

ANSC 219 – Meat Technology
ANSC 301 – Food Animal Prod, Mgmt, & Eval
ANSC 309 – Meat Production and Marketing
ANSC 310 – Meats Selection and Grading

Other courses to consider:

Additional Animal Production Courses:

ANSC 401 – Beef Production;
ANSC 402 – Sheep Production
ANSC 403 – Pork Production
ANSC 404 – Poultry Science
ANSC 420 – Ruminant Nutrition
ANSC 422 – Companion Animal Nutrition
FSHN 101 – Introduction to Food Science and Nutrition
FSHN 471 – Food and Industrial Microbiology

Nutrition Focus

Basic Science Courses:

ANSC 350 – Cellular Metabolism in Animals
ANSC 420 – Ruminant Nutrition
ANSC 422 – Companion Animal Nutrition
ANSC 524 – Nonruminant Nutrition Concepts

Applied Science Courses:

ANSC 322 – Feeds and Feeding

Other courses to consider:

FSHN 420 – Nutritional aspects of disease
FSHN 426 – Biochemical Nutrition I
MCB 450 – Introductory Biochemistry

Concepts of nutrition will be found in the management courses below. We recommend choosing a course(s) that focuses on your species of choice:

ANSC 306 – Equine Science
ANSC 307 – Companion Animal Management
ANSC 400 – Dairy Herd Management
ANSC 401 – Beef Production
ANSC 402 – Sheep Production
ANSC 403 – Pork Production
ANSC 404 – Poultry Science

Poultry Focus

Basic Science Courses:

ANSC 524 – Nonruminant Nutrition Concepts

Applied Science Courses:

ANSC 205 – World Animal Resources
ANSC 322 – Livestock Feeds and Feeding
ANSC 404 – Poultry Management

Other courses to consider:

Poultry Consortium Courses
(<http://www.mwpoultry.org/COEcourses.html>)

Prevet Focus

CHEM 232/233 – Elementary Organic Chemistry I and Lab
CHEM 332 – Elementary Organic Chemistry II
MCB 450 – Introductory Biochemistry
PHYS 101 – College Physics: Mech & Heat
PHYS 102 – College Physics: E&M & Modern
IB 104, IB 150 & 151, or MCB 150 & 151 – General Biology with Lab
MCB 100/101 (already required) – Microbiology with Lab

Reproduction Focus

Basic Science Courses:

ANSC 331 – Biology of Reproduction
ANSC 350 – Cellular Metabolism in Animals
ANSC 431 – Advanced Reproductive Biology
ANSC 452 – Animal Growth and Development
ANSC 533 – Repro Physiology Lab Methods

Applied Science Courses:

ANSC 437 – Advanced Repro Management

Other courses to consider:

CHEM 232/233 – Elementary Organic Chemistry I and Lab
CHEM 332 – Elementary Organic Chemistry II
MCB 401/403 – Cell & Membrane Physiology and Lab
MCB 402/404 – Sys & Integrative Physiology and Lab
MCB 408 – Immunology
MCB 410 – Developmental Biology
MCB 413 – Endocrinology
MCB 450 – Introductory Biochemistry

Swine Focus

Basic Science Courses:

ANSC 363 – Behavior of Domestic Animals
ANSC 409 – Meat Science
ANSC 420 – Ruminant Nutrition
ANSC 431 – Adv Repro Biology
ANSC 444 – Applied Animal Genetics
ANSC 452 – Animal Growth and Development
ANSC 467 – Applied Animal Ecology

Applied Science Courses:

ANSC 219 – Meat Technology
ANSC 301 – Food Animal Prod, Mgmt, & Eval
ANSC 309 – Meat Production and Marketing
ANSC 322 – Livestock Feeds and Feeding
ANSC 403 – Pork Production
ANSC 437 – Adv Reproductive Management
ANSC 471 – Leaders and Entrepreneurs

Other courses to consider:

ANSC 211 – Breeding Animal Evaluation (judging team)
ANSC 310 – Meat Selection and Grading (judging team)
ANSC 312 – Advanced Livestock Evaluation (judging team)