### Focus Areas, Updated 11/10/17

#### Beef Focus

<table>
<thead>
<tr>
<th>Basic Science Courses:</th>
<th>Applied Science Courses:</th>
<th>Other Courses to Consider:</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANSC 363 – Behavior of Domestic Animals</td>
<td>ANSC 219 – Meat Technology</td>
<td>ANSC 211 – Breeding Animal Evaluation (judging team)</td>
</tr>
<tr>
<td>ANSC 409 – Meat Science</td>
<td>ANSC 301 – Food Animal Prod, Mgmt, &amp; Eval</td>
<td>ANSC 310 – Meat Selection and Grading (judging team)</td>
</tr>
<tr>
<td>ANSC 420 – Ruminant Nutrition</td>
<td>ANSC 309 – Meat Production and Marketing</td>
<td>ANSC 312 – Advanced Livestock Evaluation (judging team)</td>
</tr>
<tr>
<td>ANSC 431 – Adv Repro Biology</td>
<td>ANSC 322 – Livestock Feeds and Feeding</td>
<td></td>
</tr>
<tr>
<td>ANSC 444 – Applied Animal Genetics</td>
<td>ANSC 401 – Beef Production</td>
<td></td>
</tr>
<tr>
<td>ANSC 452 – Animal Growth and Development</td>
<td>ANSC 437 – Adv Reproductive Management</td>
<td></td>
</tr>
<tr>
<td>ANSC 467 – Applied Animal Ecology</td>
<td>ANSC 471 – Leaders and Entrepreneurs</td>
<td></td>
</tr>
</tbody>
</table>

#### Behavior Focus

<table>
<thead>
<tr>
<th>Basic Science Courses:</th>
<th></th>
<th>Other Courses to Consider:</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANSC 366 – Animal Behavior</td>
<td></td>
<td>ANTH/IB 437 – Primate Behav Endocrinology (offered infrequently)</td>
</tr>
<tr>
<td>ANSC 363 – Behavior of Domestic Animals</td>
<td></td>
<td>IB 432 – Genes and Behavior</td>
</tr>
<tr>
<td>ANSC 406 – Zoo Animal Conservation Science</td>
<td></td>
<td>IB 467 – Principles of Systematics</td>
</tr>
</tbody>
</table>

#### Business and Management Focus

- Minors to consider:
  - Business for Non-Business Majors
  - Food and Agribusiness Management
  - Leadership Studies

#### Companion Animals Focus

<table>
<thead>
<tr>
<th>Basic Science Courses:</th>
<th>Applied Science Courses:</th>
<th>Other courses to consider:</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANSC 363 – Behavior of Domestic Animals</td>
<td>ANSC 250 – Companion Animals in Society</td>
<td>CPSC 452 – Evol Genetics and Genomics</td>
</tr>
<tr>
<td></td>
<td>ANSC 370 – Companion Animal Policy</td>
<td>IB 451 – Biogeography</td>
</tr>
<tr>
<td></td>
<td>ANSC 499 – Various Companion Animal Topics</td>
<td>NRES 102 – Introduction to NRES</td>
</tr>
</tbody>
</table>

#### Conservation Biology Focus

<table>
<thead>
<tr>
<th>Basic Science Courses:</th>
<th></th>
<th>Other courses to consider:</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANSC 366 – Animal Behavior</td>
<td></td>
<td>CPSC 452 – Evol Genetics and Genomics</td>
</tr>
<tr>
<td>ANSC 446 – Population Genetics</td>
<td></td>
<td>IB 439 – Conservation Biology</td>
</tr>
<tr>
<td></td>
<td></td>
<td>IB 451 – Biogeography</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NRES 101 – Wildlife Conservation in the 21st Century</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NRES 102 – Introduction to NRES</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NRES 407 – Wildlife Population Ecology</td>
</tr>
</tbody>
</table>
### 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

<table>
<thead>
<tr>
<th>Basic Science Courses:</th>
<th>Applied Science Courses:</th>
<th>Other courses to consider:</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANSC 363 – Behavior of Domestic Animals</td>
<td>ANSC 219 – Meat Technology</td>
<td>ANSC 211 – Breeding Animal Evaluation (judging team)</td>
</tr>
<tr>
<td>ANSC 409 – Meat Science</td>
<td>ANSC 301 – Food Animal Prod, Mgmt, &amp; Eval</td>
<td>ANSC 310 – Meat Selection and Grading (judging team)</td>
</tr>
<tr>
<td>ANSC 420 – Ruminant Nutrition</td>
<td>ANSC 309 – Meat Production and Marketing</td>
<td>ANSC 312 – Advanced Livestock Evaluation (judging team)</td>
</tr>
<tr>
<td>ANSC 431 – Adv Repro Biology</td>
<td>ANSC 322 – Livestock Feeds and Feeding</td>
<td></td>
</tr>
</tbody>
</table>