# Animal Science BS

## Checklist for Discovery, Animal Science Core and Major Requirements

### Discovery Requirements

<table>
<thead>
<tr>
<th>Category</th>
<th>Course</th>
<th>Semester</th>
<th>Credits</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Writing</td>
<td>ENGL 401</td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Quantitative Reasoning</td>
<td>BIOL 528</td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Biological Sciences*</td>
<td>BIOL 412</td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Physical Sciences*</td>
<td>CHEM 403</td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Fine and Performing Arts</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Humanities</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Historical Perspectives</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>World Cultures</td>
<td></td>
<td></td>
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<tr>
<td>Social Science</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eng. Tech. and Society</td>
<td>BIOL 401</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Inquiry</td>
<td></td>
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</tr>
</tbody>
</table>

*These Discovery requirements are fulfilled by Animal Science Foundation courses.

*Or BIOL 555 Experimental Design & Analysis Lab

### Animal Science Foundation Courses

(All Core courses must be completed with a grade of C- or better.)

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester</th>
<th>Credits</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 411</td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>BIOL 412</td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>BIOL 528*</td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>BMCB 201*</td>
<td></td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>BMS 503/504</td>
<td></td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>CHEM 403</td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>CHEM 404</td>
<td></td>
<td>4</td>
<td>30</td>
</tr>
</tbody>
</table>

*Students interested in graduate school should take 2 semesters of Organic Chemistry (CHEM 651/653 and CHEM 652/654) and 1 semester of Biochemistry (BMCI 658/659).

### Requirements for all Animal Science majors

(All required courses must be completed with a grade of C- or better)

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester</th>
<th>Credits</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Careers in Animal Science</td>
<td>ANSC 406</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Animal Agriculture Today</td>
<td>ANSC 421</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Fundamentals of Animal Health</td>
<td>AAS 419</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Anatomy &amp; Physiology</td>
<td>ANSC 511</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Anatomy &amp; Physiology</td>
<td>ANSC 512</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Tech Wil Animal Science (WI)</td>
<td>ANSC 543*</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Principles Animal Nutrition</td>
<td>ANSC 609</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Gen Domestic Animals</td>
<td>ANSC 610</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Gen Domestic Animals</td>
<td>ANSC 612</td>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>

*ENGL 419, 501, 502 or 503 may be substituted.

### Elective courses

<table>
<thead>
<tr>
<th>Animal Rights Soc Issues (WI)</th>
<th>ANSC 502</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disease courses (choose one)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dairy Cattle Disease Seminar</td>
<td>AAS 574</td>
<td>2</td>
</tr>
<tr>
<td>Equine Disease</td>
<td>ANSC 629</td>
<td>4</td>
</tr>
<tr>
<td>Small Ruminants/Camelids/Swine/Paw</td>
<td>ANSC 625</td>
<td>4</td>
</tr>
<tr>
<td>Reproduction courses (choose one)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physiology Reproduction</td>
<td>ANSC 701</td>
<td>4</td>
</tr>
<tr>
<td>Physiology of Reproduction</td>
<td>ANSC 715</td>
<td>4</td>
</tr>
<tr>
<td>Repro MogulAI</td>
<td>ANSC 724</td>
<td>4</td>
</tr>
<tr>
<td>Endocrinology</td>
<td>BMS 702</td>
<td>4</td>
</tr>
</tbody>
</table>

### Electives

Pick 3 courses from the Elective list (attached). At least 2 must be at the 500 level or above. For classes less than 3 credits, 2 must be taken together to count as 1 requirement.

### Requirements for students interested in graduate school

<table>
<thead>
<tr>
<th>Course</th>
<th>Instead of</th>
<th>Credits</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMCD 658/659L</td>
<td>BMCB 501</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>CHEM 651/653</td>
<td></td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>CHEM 652/654</td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>MATH 4248</td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>PHYS 401</td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>PHYS 402</td>
<td></td>
<td>4</td>
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</tr>
</tbody>
</table>

*4 courses must be writing intensive (WI). The WI course-in-major requirement is satisfied by ANSC 543.

### Writing Intensive

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester</th>
<th>Credits</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 491</td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>ANSC 543 (major)</td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>ANSC 602 (600 level or above)</td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Any additional WI course</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

## Capstone Experience

The capstone requirement may be satisfied through a course (e.g., ANSC 698, ANSC 728W, ANSC 795, or ANSC 797). ANSC 799 created work or project, or some form of experiential learning (e.g., honors thesis, mentored research projects, and other special student activities).

## Minor (If any)

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Credit Hours: 128 Revised 27 Apr 2017
Animal Science Electives

ANSC 504 Equine Science (4 crd)
ANSC 507 Survey of Equine Training Techniques (3 crd)
ANSC 510 Integrated Culture & Ag Ireland (WI, WC DISC) (2 or 4 crd)
ANSC 600 Field Experience (1 to 4 crd)
ANSC 605 Poultry Production and Health Mgt (4 crd)
ANSC 620 Equine Diseases (4 crd)
ANSC 650 Dairy Industry Travel Course (1 crd)
ANSC 625 Diseases Multiple Ag Species (4 crd)
ANSC 635 Nonprofit Mgt for the Agricultural Business
ANSC 698 CREAM (2 semesters) (8 crd)
ANSC 701 Physiology of Reproduction (4 crd)
ANSC 708 Ruminant Nutritional Physiology (3 crd)
ANSC 710 Dairy Nutrition (4 crd)
ANSC 715 Physiology of Lactation (4 crd)
ANSC 724 Repro Mgt/AI (4 crd)
ANSC 725 Equine Sports Medicine (4 crd)
ANSC 727 Adv Dairy Mgt I (4 crd)
ANSC 728 Adv Dairy Mgt II (WI) (4 crd)
ANSC 750 Collaborative Farm Design (4 crd)
ANSC 795 Investigations (1 to 4 crd)
ANSC 796 Equine Senior Seminar (2 crd)
ANSC 799 Honors Thesis (1 to 4 crd)

AAS 402 Intro to Livestock and Poultry Mgt (2 crd)
AAS 421 LG Animal Behavior & Handling Techniques (2 crd)
AAS 423 Dairy Selection (2 crd)
AAS 425 Intro Dairy Herd Mgt (4 crd)
AAS 426 Eq Conf & Lameness (4 crd)
AAS 432 Intro Forage & Grassland Mgt (3 crd)
AAS 434 Equip/Facilities Mgt (3 crd)
AAS 437 Equine Handling and Care Techniques (4 crd)
AAS 527 Companion Animal Diseases (2 crd)
AAS 546 Animal Business App (4 crd)
AAS 547 Applied Equine Mgt (3 crd)
AAS 548 Applied Animal Business (4 crd)
AAS 572 Equine Comparative Operations (2 crd)
AAS 574 Dairy Cattle Disease Seminar (2 crd)
ADMN 502 Financial Accounting (4 crd)
BMCB 753 Cell Culture (5 crd)
BMS 602 Pathogenic Microbiology (3 crd)
BMS 623 Comparative Histology (4 crd)
BMS 655 Human and Animal Parasites (3 crd)
BMS 702 Endocrinology (4 crd)
BMS 703 Infectious Disease & Health 4 crd)
BMS 704 Pathologic Basis of Disease (4 crd)
BMS 705 Immunology (3 crd)
BMS 706 Virology (3 crd)
BMS 711 Toxicology (4 crd)
BMS 712 Grand Rounds (2 crd)
BMS 718 Mammalian Physiology (WI) (4 crd)
BUS 410 Intro to Entrepreneurship (4 crd)
CMN 500 Public Speaking (4 crd) or
CMN 600 Public Speaking as a Civic Art (WI) (4 crd)
EREC 411 Enviro & Res Econ Perspectives (SS DISC) (4 crd)
EREC 680 Ag & Food Policy (4 crd)
MGT 580 Intro to Organizational Behavior (4 crd)
PAUL 450 Personal Finance (QR DISC) (4 crd)
SAFS 642 TEAM Organic (2 semesters)
SAFS 729 Agricultural Waste Management (4 crd)
ZOOOL 610 Principles of Aquaculture (4 crd)
ZOOOL 611 Principles of Aquaculture Lab (2 crd)
ZOOOL 613 Animal Behavior (WI) (5 crd)
ZOOOL 773 Physiology of Fish (4 crd)
ZOOOL 777 Neurobiology & Behavior (3 crd)

Business

AAS 546 Animal Business App
ANSC 635 Nonprofit Mgt for the Agricultural Business
ADMN 502 Financial Accounting
BUS 410 Intro to Entrepreneurship
CMN 500 Public Speaking or
CMN 600 Public Speaking as a Civic Art (WI)
MGT 580 Intro to Organizational Behavior
PAUL 450 Personal Finance (QR DISC)
Animal Science Electives

Experiential

ANSC 600 Field Experience
ANSC 605 Poultry Production and Health Mgt
ANSC 698 CREAM (2 semesters)
ANSC 727 Adv Dairy Mgt I
ANSC 728 Adv Dairy Mgt II (WI)
ANSC 750 Collaborative Farm Design
ANSC 795 Investigations
ANSC 799 Honors Thesis

Equine

ANSC 504 Equine Science (4 crd)
ANSC 507 Survey of Equine Training Techniques (3 crd)
ANSC 620 Equine Diseases (4 crd)
ANSC 725 Equine Sports Medicine (4 crd)
ANSC 796 Equine Senior Seminar (2 crd)
AAS 426 Eq Conf & Lameness (4 crd)
AAS 437 Eq Handling and Care Techniques (4 crd)
AAS 547 Applied Equine Mgt (3 crd)
AAS 572 Eq Comparative Operations (2 crd)

Dairy

ANSC 650 Dairy industry Travel Course (1 crd)
ANSC 708 Ruminant Nutritional Physiology (3 crd)
ANSC 710 Dairy Nutrition (4 crd)
ANSC 715 Physiology of Lactation (4 crd)
ANSC 727 Adv Dairy Mgt I (4 crd)
ANSC 728 Adv Dairy Mgt II (WI) (4 crd)
AAS 423 Dairy Selection (2 crd)
AAS 425 Intro Dairy Herd Mgt (4 crd)
AAS 574 Dairy Cattle Disease Seminar (2 crd)

2 credit

ANSC 510 Integrated Culture & Ag Ireland (WI, WC DISC) (2 or 4 crd)
ANSC 796 Equine Senior Seminar (2 crd)
AAS 402 Intro to Livestock and Poultry Mgt (2 crd)
AAS 421 Lg Animal Behavior & Handling Techniques (2 crd)
AAS 423 Dairy Selection (2 crd)
AAS 527 Companion Animal Diseases (2 crd)
AAS 572 Equine Comparative Operations (2 crd)
AAS 574 Dairy Cattle Disease Seminar (2 crd)
BMS 712 Grand Rounds (2 crd)