## ANIMAL SCIENCE, PHD

### Requirements for Students Matriculating in or before Academic Year 2023-2024

Learn more about Graduate College Academic Regulation 7.0 ([http://catalog.okstate.edu/graduate-college/#70](http://catalog.okstate.edu/graduate-college/#70)).

### Total Hours: 60 (Beyond the Master's Degree)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ANSI 5102</td>
<td>Ethics and Professionalism in Animal and Food Science</td>
<td>15</td>
</tr>
<tr>
<td>ANSI 5010</td>
<td>Special Problems</td>
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<tr>
<td>ANSI 5113</td>
<td>Basic Reproductive Physiology</td>
<td></td>
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<tr>
<td>ANSI 5123</td>
<td>Functional and Molecular Endocrinology</td>
<td></td>
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<tr>
<td>ANSI 5213</td>
<td>Advances in Meat Science</td>
<td></td>
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<tr>
<td>ANSI 5303</td>
<td>Advanced Animal Breeding</td>
<td></td>
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<tr>
<td>ANSI 5313</td>
<td>Marker Assisted Selection in Livestock</td>
<td></td>
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<tr>
<td>ANSI 5333</td>
<td>Carcass Value Estimation Systems</td>
<td></td>
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<tr>
<td>ANSI 5553</td>
<td>Interpreting Animal and Food Science Research</td>
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<tr>
<td>ANSI 5573</td>
<td>Techniques in Animal Molecular Biology</td>
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<tr>
<td>ANSI 5613</td>
<td>Advanced Beef Production</td>
<td></td>
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<tr>
<td>ANSI 5733</td>
<td>Advanced Ruminant Nutrition</td>
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<tr>
<td>ANSI 5743</td>
<td>Rumenology</td>
<td></td>
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<tr>
<td>ANSI 5753</td>
<td>Animal Nutrition Techniques and Laboratory Methods</td>
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<tr>
<td>ANSI 5763</td>
<td>Advanced Nonruminant Nutrition</td>
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<tr>
<td>ANSI 5773</td>
<td>Protein Nutrition</td>
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<tr>
<td>ANSI 5783</td>
<td>Vitamin and Mineral Nutrition</td>
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<tr>
<td>ANSI 5793</td>
<td>Animal Nutrition Techniques and Laboratory Methods</td>
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<tr>
<td>ANSI 5753</td>
<td>Animal Nutrition Techniques and Laboratory Methods</td>
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<tr>
<td>Food Science (FDSC) 5000- and 6000-level courses</td>
<td>15</td>
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</tbody>
</table>

### Electives ¹

Select 15 hours of other graduate courses with the approval of the advisory committee and area of specialization.

Choose from graduate level classes in STAT, BIOC, MICR, BIOL, ZOOL, NSCI, BVSC, or other courses deemed appropriate by advisory committee.

### Other Requirements ¹

- ANSI 6000 Doctoral Research and Dissertation (Offered for variable credit, 1-10 credit hours, maximum of 30 credit hours.)
- or FDSC 6000 Doctoral Research and Dissertation
- ANSI 6110 Seminar (Offered for variable credit, 1-6 credit hours, maximum of 6 credit hours.)

### Total Hours

- 30
- 30
- 60

¹ Combined Required Courses, Electives and Other Requirements hours must total 60 hours.