

# Animal Science

**Note:** MSU's programs in the biological sciences are distributed across multiple departments; MSU does not have a single Department of Biology. For additional options see *Biological Sciences at MSU, Department of Animal and Range Sciences*.

The animal science curricula are administered by the Department of Animal and Range Sciences. The curricula in animal science provide students with a firm foundation in the biological and natural sciences, animal breeding, reproductive physiology, nutrition and livestock production and management. Applications to production environments of the western United States are emphasized, including the close relationships among livestock, rangeland and natural resources. Three options are offered leading to a B.S. in Animal Science. Proper use of restricted electives allows students to tailor curricula to meet their individual needs.

## Equine Science Option

The Equine Science Option emphasizes science and technology combined with practical aspects of management, horsemanship and training. Graduates of this program will have a firm foundation to meet the growing needs of the equine industry. This program is designed to prepare students for employment in breeding, nutrition, and management of facilities and land, as well as in the allied industries such as sales, feed, tack, and equipment. Students can tailor their program for more emphasis in biotechnology, business, or range management.

## Livestock Management & Industry Option

The Livestock Management & Industry Option stresses the application of science to livestock production, incorporating courses in agricultural economics and business. Emphasis is placed on the application of the principles of economics, range science, genetics, physiology and nutrition in sustainable livestock production systems and business and management skills as they relate to livestock enterprises and service industries closely allied to livestock production. It is designed to allow flexible course work choices to prepare graduates to manage livestock enterprises or for employment with companies producing and marketing livestock, animal feeds and health products, as well as employment with a variety of communication and service organizations such as breed associations, commodity groups, livestock publications and government agencies.

## Science Option

The Science Option emphasizes greater depth in the basic sciences and is designed for highly motivated students who have a strong interest in graduate training or professional school. Individual curricula can be tailored to provide excellent preparation for veterinary school, medical school, or graduate studies in animal biotechnology, physiology, nutrition or genetics.

## Undergraduate Programs

- Equine Science Option (<http://catalog.montana.edu/undergraduate/agriculture/animal-science/equine-science-option/>)
- Livestock Management & Industry Option (<http://catalog.montana.edu/undergraduate/agriculture/animal-science/livestock-management-industry-option/>)
- Science Option (<http://catalog.montana.edu/undergraduate/agriculture/animal-science/science-option/>)

## Undergraduate Minors

- Animal Science Minor (Non-Teaching) (<http://catalog.montana.edu/undergraduate/agriculture/animal-science/animal-science-minor-nonteaching/>)

- Genetics Minor (Non-Teaching) (<http://catalog.montana.edu/undergraduate/agriculture/genetics-minor/>)

## Graduate Programs

- M.S. in Animal and Range Sciences (<http://catalog.montana.edu/graduate/agriculture/animal-range-sciences/ms-animal-and-range-science/>)
  - M.S. in Land Rehabilitation (interdisciplinary) (<http://catalog.montana.edu/graduate/agriculture/land-resources-environmental-sciences/ms-land-rehabilitation/>)
  - Ph.D. in Animal and Range Sciences (<http://catalog.montana.edu/graduate/agriculture/animal-range-sciences/phd-animal-range-sciences/>)
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