

# Animal Science

## Careers & Technology

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### DEGREE

A.S. — Equine Science

#### Program Description

This program offers courses designed for students in the Agriculture Business, Veterinary Technology, and Equine Science programs.

#### Career Opportunities

See Career Opportunities in Agriculture Business and Veterinary Technology.

#### Highlights

Provides an introduction to the livestock industry

#### NOTE TO TRANSFER STUDENTS:

If you are interested in transferring to a four-year college or university to pursue a bachelor's degree in this major, it is critical that you meet with a CRC counselor to select and plan the courses for your major. Schools vary widely in terms of the required preparation. The courses that CRC requires for an associate's degree in this major may be different from the requirements needed for the bachelor's degree.

**For information about the student learning outcomes for this program, see <http://www.crc.losrios.edu/pslo>**

### DEGREE

#### A.S. — Equine Science

CODE #1633

Equine Science is the study of the principles behind the biology, function, and management of the horse. This program prepares students to develop the skills and knowledge that will help them gain a strong and competitive position in the equine industry.

Many Equine Science graduates aim for a future in horse farm management at breeding facilities, lesson barns, and race and show training stables. Students may also qualify for employment as technologists, consultants, show and race facility managers and staff, high school and community or junior college riding and equine science instructors, government agents, journalists, and sales or service representatives for companies promoting horse feed, health, and care products. Other career opportunities are available through breed associations, humane organizations, agriculture extension services, recreational services, horse publications, and more.

Many of these options require more than two years of college study. Classes beyond the associate degree may be required for career options or to fully prepare students for transfer to a university program.

#### REQUIRED PROGRAM..... Units

ANSC 300	Introduction to Animal Science.....	3
ANSC 301	Introduction to Equine Science.....	3
ANSC 302	Equine Reproduction .....	2
ANSC 303	Equine Business Management .....	3
ANSC 304	Livestock Feeding and Nutrition .....	3
ANSC 305	Equine Health.....	3
ANSC 306	Basic Equine Handling.....	1
ANSC 307	Farrier Science .....	3
AGB 310	Agriculture Computer Applications.....	3
AGB 320	Agriculture Accounting.....	3
AGB 330	Agriculture Sales and Communication (3) <b>or</b>	
	AGB 331 Agriculture Marketing (3).....	3
ANSC 498	Work Experience in Animal Science.....	1-4
<b>TOTAL UNITS REQUIRED .....</b>		<b>31-34</b>

#### Associate Degree

The Equine Science Associate in Science (A.S.) degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See *CRC graduation requirements*.

## ANIMAL SCIENCE (ANSC)

### ANSC 300

#### Introduction to Animal Science

3 Units

*Prerequisite: None*

*General Education: AA/AS Area IV*

*Course Transferable to UC/CSU*

*Hours: 54 hours LEC*

This course provides a survey of the livestock industry, including the supply of animal products and their uses. A special emphasis is placed on the origin, characteristics, adaptation and contributions of farm animals to the agriculture industry. Students analyze the economic trends and career opportunities in animal agriculture.

<p><b>ANSC 301</b>  <b>Introduction to Equine Science</b> <b>3 Units</b>  <i>Prerequisite: None</i>  <i>General Education: AA/AS Area IV</i>  <i>Course Transferable to UC/CSU</i>  <i>Hours: 54 hours LEC</i></p> <p>A survey of the equine industry including equine evolution, selection, nutrition and feeding, breeding, facilities, handling and health management. Emphasis on sound management practices. This course may include field trips and the instructor may or may not provide transportation.</p>	<p><b>ANSC 306</b>  <b>Basic Equine Handling</b> <b>1 Unit</b>  <i>Prerequisite: None</i>  <i>Course Transferable to CSU</i>  <i>Hours: 54 hours LAB</i></p> <p>This course offers an introduction to the fundamentals of horse handling, with an emphasis on safety. Course covers identification of equine behavioral patterns, handling skills such as catching, haltering, tying, lunging and round-pen training, and recognizing how human/horse interactions affect equine behavior.</p>
<p><b>ANSC 302</b>  <b>Equine Reproduction</b> <b>2 Units</b>  <i>Prerequisite: None</i>  <i>Course Transferable to CSU</i>  <i>Hours: 32 hours LEC ; 12 hours LAB</i></p> <p>This course combines the study of basic genetic principles with the study of the anatomical and physiological aspects of reproduction as they relate to equine reproduction, emphasizing genetic principles and reproductive aspects. Artificial insemination, embryo manipulation, and current innovations in productive biotechnology will also be examined. This course may include field trips and off-site laboratories and the instructor may or may not provide transportation.</p>	<p><b>ANSC 307</b>  <b>Farrier Science</b> <b>3 Units</b>  <i>Prerequisite: None</i>  <i>Course Transferable to CSU</i>  <i>Hours: 54 hours LEC</i></p> <p>This course covers horseshoeing principles and practices, including basic anatomy and physiology of the horse's limbs and feet, horseshoeing terminology, and guidelines for assessing a proper horseshoeing job. This course focuses on causes, treatment and prevention of common lameness problems.</p>
<p><b>ANSC 303</b>  <b>Equine Business Management</b> <b>3 Units</b>  <i>Prerequisite: None</i>  <i>Course Transferable to CSU</i>  <i>Hours: 54 hours LEC</i></p> <p>Fundamentals of equine business operations, including taxes, liability, insurance, software, and facility design. The class will emphasize the skills necessary to manage a ranch, barn, stable, boarding, breeding, or training facility. This course may include field trips and the instructor may or may not provide transportation.</p>	<p><b>ANSC 495</b>  <b>Independent Study in Animal Science</b> <b>1-3 Units</b>  <i>Prerequisite: None</i>  <i>Course Transferable to CSU</i>  <i>See UC Limitations &amp; Counselor</i>  <i>Hours: 18 hours LEC ; 54 hours LAB</i></p>
<p><b>ANSC 304</b>  <b>Livestock Feeding and Nutrition</b> <b>3 Units</b>  <i>Prerequisite: None</i>  <i>Course Transferable to CSU</i>  <i>Hours: 36 hours LEC ; 54 hours LAB</i></p> <p>The fundamentals of digestion and absorption in both ruminants and non-ruminants are discussed. The nutritive value of feeds as they relate to the formulation of livestock rations will be emphasized including by-product feeding. Includes proper selection, evaluation, and utilization of feeds. This course may include field trips and off-site laboratories and the instructor may or may not provide transportation.</p>	<p><b>ANSC 498</b>  <b>Work Experience in Animal Science</b> <b>1-4 Units</b>  <i>Prerequisite: None</i>  <i>Course Transferable to CSU</i>  <i>Hours: 300 hours LAB</i></p> <p>This course provides students with opportunities to develop marketable skills in preparation for employment or advancement within their current job. Course content will include understanding the application of education to the workforce; completion of required forms, which document the student's progress and hours spent at the work site; and developing workplace skills and competencies. During the course of the semester, the student is required to fulfill an 18 hour orientation and 75 hours of related paid work experience, or 60 hours of unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. The course may be taken again when there is new or expanded learning on the job for a maximum of 16 units.</p>
<p><b>ANSC 305</b>  <b>Equine Health</b> <b>3 Units</b>  <i>Prerequisite: None</i>  <i>Course Transferable to CSU</i>  <i>Hours: 54 hours LEC</i></p> <p>This course introduces the major organ systems of the horse. Emphasis is on preventive maintenance and necessary managerial practices needed to keep the equine athlete, broodmare or family horse in good health.</p>	<p><b>ANSC 499</b>  <b>Experimental Offering in Animal Science</b> <b>.5-4 Units</b>  <i>Prerequisite: None</i>  <i>Course Transferable to CSU</i>  <i>See UC Limitations &amp; Counselor</i>  <i>Hours: 72 hours LEC</i></p>