

Equine Science and Management

B.S.

New Program Proposal, March 2025

Animal Science, CAHNR

CIP Code: 01.0307; Horse Husbandry/Equine Science and Management

Planned effective term: Fall 2026 (First term of admission)

Introduction

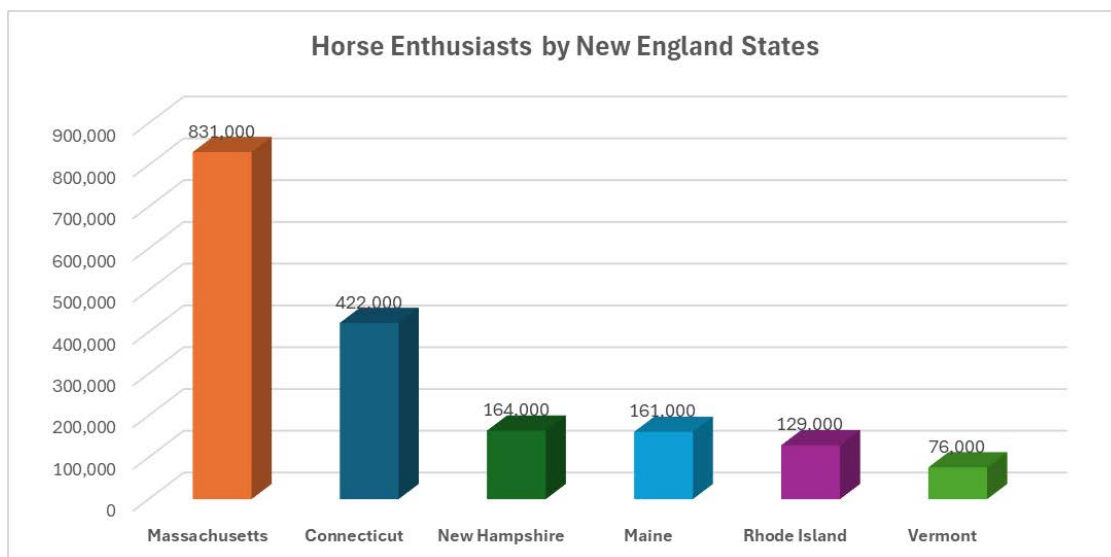
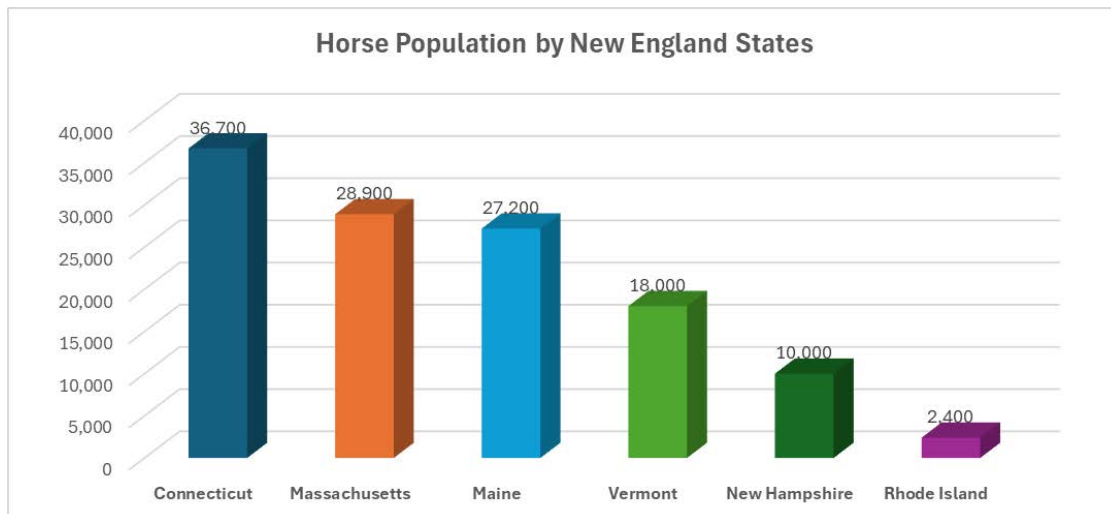
The proposed Equine Science and Management degree is designed to prepare students for careers in the horse industry by coupling a scientific foundation with practical experiential learning. The program will provide students with core coursework in biology and physiology, experiential learning opportunities through required internships, practicums, field work, and labs, and opportunities to develop competencies important for careers in the horse industry. The Equine Science and Management degree will be housed within the Department of Animal Science, and we will be the only Land Grant university in the Northeast United States to offer this type of degree program. Other programs in the Northeast are located at small, liberal arts colleges with limited resources for programs or are offered as a minor or focus within an Animal Science major, leaving no comparable programs. Currently, students interested in a robust equine science program travel to other regions of the United States for their equine programs (e.g., Kentucky, Colorado). This creates a niche for an Equine Science and Management program in the Northeast. Most students interested in equine studies enroll in Animal Science programs and take equine specific classes and/or equine options within that ANSC program. Our target population is these students, who would be most likely to pursue an Equine Science and Management degree as opposed to another degree with the area of interest or concentration in equine, given the choice.

UConn is a unique place to offer this degree program as we already have outstanding equine facilities, faculty and staff expertise, riding teams and an extensive riding lesson program, an active Morgan breeding program, and extensive opportunities for hands-on experiential learning. We maintain a herd of 70 horses that support a wide variety of programs including competitive riding teams, riding lessons for students and the public, clinics, research, teaching and extension programs. Our teams include an Equestrian Team with 30 riders, a Dressage Team with 16 riders, Men's and Women's Polo Teams with 10 total riders and Western Team with 18 riders. Our facilities include a main barn with 58 stalls, four tack rooms, club room, classroom, a 100' x 130' lighted outdoor arena, two round pens, and a state of the art 120' x 220' indoor riding arena with a public viewing area and heated lobby. Additionally, our second

breeding unit includes stocks, a laboratory, and foaling stalls. Outdoor facilities include turnout sheds and paddocks with new fencing.

There are ample opportunities for careers in the equine industry, as demonstrated below, with specific career competencies incorporated into the program learning objectives designed to prepare students for entry into the workforce. Plans for this program have been shared with individuals on the Animal Science Department Advisory Committee, as well as professionals in the equine industry in New England and the Mid-Atlantic region. There has been positive feedback and support for the program (see Appendix A).

Connecticut has the largest population of horses of any New England state and is home to over 500 horse-related businesses. Expenditures related to the equine industry in Connecticut approach \$40 million. Nationally, the equine industry supports more than 1.3 million direct jobs, contributing over \$41 billion in total employment compensation and \$74 billion in direct value to the economy (AHC Economic Impact Study, 2023).



Program Information

Location(s)/Modalities

The Equine Science and Management program will be offered in-person on the Storrs campus. In the future, three classes within the program will be offered in a hybrid format to allow for the development of an online certificate program in Equine Science.

Professional Licensure/Certification

This program does not lead to a profession that requires professional licensure or certification.

Catalog Description

This major leading to a B.S. degree will prepare students for careers in the horse industry by combining a scientific foundation with practical experiential learning opportunities in equine nutrition, physiology, reproduction, breeding, genetics, and management. It also includes the practical aspects of finance, communication, marketing, and leadership within the equine industry.

All courses in group A must be completed. Three credits from each B subgroup are required, plus an additional three credits from subgroups B-2 or B-3. One course from Group C with W must be completed.

Plan of Study

GROUP A

All courses must be completed.

Course	Title	Credits	F/S
ANSC 1001	Introduction to Animal Science	3	F
ANSC 1347	Stable Management	4	F/S
ANSC 2251	Horse Science	3	F
ANSC 3121	Principles of Animal Genetics	3	F
ANSC 3194	Career Paths in Animal Science	1	S
ANSC 3411	Equine Nutrition	4	S
ANSC 3452	Horse Breeding Farm Management	3	S
ANSC 3551	Equine Training I - Foundations	2	F/S
ANSC 4457	Methods of Equitation Instruction	3	S
BIOL 1107	Principles of Biology I	4	F/S
BIOL 1108	Principles of Biology II	4	F/S
CHEM 1122 or CHEM 1127Q	Chemical Principles & Applications or General Chemistry 1	4	F/S
CHEM 2241 or CHEM 2443	Organic Chemistry or Organic Chemistry	3	F/S
ENGL 1007	Seminar and Studio in Writing and Multimodal Composition	4	F/S
MATH or STAT	One MATH or STAT class	3-4	F/S
MCB 2610 or PATH 2720	Fundamentals of Microbiology or Medical Microbiology: Viruses and Parasites	4	F/S

PATH 2100	Anatomy & Physiology of Animals	4	F
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GROUP B – A minimum of 3 credits in each sub-group is required, plus an additional 3 credits in group B-2 or B-3.

GROUP B-1 Communication & Leadership

AHNR 4500	Leadership Development in Extension Education	3	
AIRF 2000	Team and Leadership Fundamentals	1	
AIRF 2200	Team and Leadership Fundamentals	1	
MISI 1101	General Military Science 1a	1	
MISI 1102	General Military Science 1b	1	
BADM 3740	Managerial & Interpersonal Behavior	3	
COMM 1000	The Process of Communication	3	
COMM 1100	Principles of Public Speaking	3	
COMM 2100	Professional Communication	3	
COMM 2200	Interpersonal Communication	3	

GROUP B-2 Business Management

ARE 1150	Principles of Applied and Resource Economics	3	F
ARE 2150	Intermediate Applied & Resource Economics	3	F
ARE 2215	Business Management	3	S
ARE 3221	Managerial Economics & Business Strategies	3	S
ARE 3222	Marketing & Consumer Behavior	3	F
BADM 2234	The Entrepreneurial Journey	3	F/S
BADM 2237	Personal Brand & Management	3	F/S

GROUP B-3 Finance

ACT 2001	Principles of Financial Accounting	3	F/S
ARE 2210	Essentials of Accounting & Business	3	F
ARE 3225	Price Analysis & Futures Trading	3	S
ARE 4215	Sustainable Business Planning	3	F/S
ARE 4217	Business Finance & Investment Management	3	S
ARE 4438E	Valuing the Environment	3	S
BADM 2101	Principles of Managerial Accounting	3	F/S
BADM 2235	Personal Financial Literacy	3	S

GROUP C - One course from Group C with W must be completed

ANSC 3311 & ANSC 3312W	Comparative Exercise Physiology	4	S
ANSC 3313 & ANSC 3314W	Growth Biology & Metabolism in Domestic Livestock	4	F
ANSC 3316 & ANSC 3317W	Endocrinology of Farm Animals	4	S
ANSC 3323 & ANSC 3324W	Animal Embryology and Biotechnology	4	F
ANSC 4311 & ANSC 4312W	Advanced Animal Nutrition	4	F

Suggested Electives

ANSC 1602	Behavior & Training of Domestic Animals	3	S
ANSC 3457	Advanced Broodmare & Foal Management	2	S
ANSC 3552	Equine Training II - Backing	2	S
ANSC 3553	Equine Training III - Advanced	2	F
ANSC 3554	Equine Sports Rehabilitation Practicum	2	F/S
ANSC 3555	Equine Rehabilitation Seminar	1	F
PATH 2301	Health & Disease Management of Animals	3	S

Program Learning Objectives

1. Demonstrate the ability to use scientific knowledge to make care and management decisions for different classes of horses, integrating best practices.
2. Demonstrate safe and effective horse handling skills.
3. Evaluate different classes of horses for conformation, health, and soundness to determine appropriate uses.
4. Apply problem-solving and leadership skills that enhance professional success.
5. Critically evaluate, develop solutions for, and communicate effectively both verbally and in writing about complex problems affecting the equine industry.

Curricular Map

Program Learning Objectives

1. Demonstrate the ability to use scientific knowledge to make care and management decisions for different classes of horses, integrating best practices.
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Required Courses	Learning Objective				
	1	2	3	4	5
ANSC 1001 Introduction to Animal Science	X	X		X	X
ANSC 1347 Stable Management	X	X	X	X	X
ANSC 2251 Horse Science	X	X	X	X	X
ANSC 3121 Principles of Animal Genetics	X				X
ANSC 3194 Career Paths in Animal Science					X
ANSC 3411 Equine Nutrition	X		X	X	X
ANSC 3452 Horse Breeding Farm Management	X	X	X	X	X
ANSC 3551 Equine Training I – Foundations		X	X	X	
ANSC 4457 Methods of Equitation Instruction	X	X	X	X	X
PATH 2100 Anatomy and Physiology of Animals	X				X

Assessment Plan

Key performance indicators and learning objectives will be assessed as described in Appendix B. Briefly, learning objectives will be assessed twice per year (at the end of each semester) through successful completion of specific courses that meet the learning objectives, as outlined in the curriculum map. Key performance indicators will be assessed yearly. Assessment will be performed by the equine science assessment committee (composed of faculty and staff in the program) in collaboration with the Department Head and used to make recommendations for program improvement.

Graduate Outcomes

Careers in the equine industry are widely varied and include careers that directly interact with horses as well as those that provide support services to individuals in the industry. These careers include veterinarians, veterinary technicians, equine nutritionists, breeding and genetics specialists, equine trainers, riding instructors and coaches, sports psychologists, equine therapeutic riding instructors, extension educators, and youth educators. For a more complete list, see <https://animalscience.cahnr.uconn.edu/equine-career-opportunities/>. The curriculum is designed to provide a balance between skills needed for management and the equine science needed to succeed in the industry. There is a specific niche for graduates in this field, which is not fully captured by any commonly used occupation codes. Many of our graduates from the ANSC program are currently employed in the equine industry in careers that are not well-described in occupation codes, in positions like those we would expect of graduates of the Equine Science & Management degree program (e.g., equine massage therapist, veterinary assistant, horse barn manager, horse trainer, horse breeder/reproduction specialist).

The provision of an Equine Science and Management degree in the Northeast would increase our attractiveness to out-of-state students from New England and the Northeast, and potentially nationally as the program gains recognition. The majority (>80%) of our applicants to the Animal Science degree program indicate that they are interested in pursuing a veterinary degree after BS graduation. This number declines sharply by their sophomore year. The proposed new degree program in equine science and management would provide equine-oriented students who choose not to pursue the veterinary school path with essential knowledge and skills to be successful in careers in the equine industry.

Projected Enrollment, Resources, and Evaluation

Staffing

Courses in the proposed Equine Science and Management program will be taught by the current, full-time UConn Department of Animal Science faculty. Much of the coursework is already being taught; only two new courses will need to be added to complete the curriculum. Graduate student teaching assistants may support faculty teaching but more than 90% of teaching in the program will be done by faculty. No new hires are required to initiate the program; however, a request will be made to hire a full-time lecturer to support the program when the program reaches an estimated enrollment of 100-120 students-anticipated in Fall 2028. If budgetary constraints prevent such a centrally supported hire at that time, CANHR will consider a hiring plan to strengthen the Equine Science and Management degree program growth by recruiting an adjunct for a limited number of semesters to support required courses and related tasks. Students in the program will be advised by current faculty. The addition of this program will increase the advising workload for some faculty. This will be in part mitigated by

restructuring advising assignments across faculty in the Animal Science department. As the initial advisors for this program (initially 2-3 faculty, to eventually expand to 4-5) take on students in the new program, other students will be shifted to non-equine advisors to alleviate the overall impact. The impact is expected to be minimal per faculty (likely an additional 3-4 advisees per person). The eventual hire of a lecturer will also alleviate the impact on advising and teaching workloads for current faculty. Students will be offered all the support services currently offered by the university. We anticipate the need for a 0.5 FTE administrative staff starting in 2029 to support additional programmatic growth and development.

Students

There are a limited number of Universities/Colleges that offer a four-year degree in equine science. Many equine students are currently enrolled in Animal Science programs because of the lack of available Equine Science degree programs offered. We anticipate that this program will have approximately 65 student applicants in the first year and 75 to 80 applicants in subsequent years. We expect the first year of the program to enroll 30 to 40 students, reaching full capacity in four years (approximately 160 students total; Table 1). This projection is based on the current number of students within the Animal Science degree with an interest in equine science and the increasing number of applications to the Animal Science program. Currently, there are 381 students enrolled in the Animal Science B.S. program (approximately 95 students in each class). In the 2023-2024 academic year, 196 students participated in classes in the equine program. Thirty-one percent of our BS degree students were enrolled in at least one equine class. There were 119 riders that participated in the riding program, including the riding teams and the riding lesson program. Together, there were 277 unique individuals that participated in the equine program. This strong interest in the equine program is supported by a survey of current students, where 18% (32 of 180 respondents) indicated that if an Equine Science and Management B.S. program was available when they started, they would have chosen that over the Animal Science B.S. degree. We expect that the vacant seats in the Animal Science degree program will be filled with additional admits, as there are more applicants to that program than admitted students each year. In 2023, we had 829 applications to our ANSC 4-year program (admitting 455 and enrolling 103, 12.4% of the total applicant pool). In 2024, we had 951 applications (admitting 548 and enrolling 109, 11.5% of the total applicant pool). This year to date (as of Jan 17, 2025), we have 1,044 applications to our 4-year degree program. The statistics from the Admissions office support the notion that both ANSC and Equine Science and Management degrees will reach targeted enrollments when appropriate caps are put in place. Retention and graduation rates in the current Animal Science degree program are strong. Retention rates are 85%. Four- and five-year graduation rates are 74% and 79%, respectively. We expect similar retention and graduation rates in the Equine Science and Management program. We expect that students who transfer into the program may require additional time to complete their degree, depending on when they transfer. Recruitment into the program will occur through traditional methods as well as through local and regional outreach events. Our current recruitment methods have been increasing the diversity (especially race/ethnicity) of the Animal Science students, and we expect similar results with the Equine Science and Management program. To continue to increase our diversity, we will reach out to programs such as Ebony Horsewomen, who run a riding center in Hartford and serve a diverse group of youth. Evaluation of recruitment goals will be based on the number and diversity of applicants and admitted students. Should targeted numbers not be reached, we will increase recruitment activities at regional agricultural high schools and through youth organizations such as 4-H and Future Farmers of America (FFA). International students will be accepted, but there are no specific plans for the recruitment of international students.

We plan to recruit students in AY25/26, with the program ready for the first students to matriculate into the major in fall 2026. Therefore, it is important that this new major be available in the common application, allowing qualified students who are interested in equine specialties to apply for the major. We will also work with the New England Board of Higher Education (NEBHE) on approving the major for the regional tuition rate. Inclusion in this program will help solidify UConn's position as the leader for undergraduate education in equine science and management in New England.

Table 1. Predicted enrollment and completion trends.

	AY2026/27	AY2027/28	AY2028/29	AY2029/30	AY2030/31	AY2031/32
New students enrolled this year	30-40	30-40	30-40	30-40	30-40	30-40
Total students enrolled	30-40	60-80	90-120	120-160	120-160	120-160
Anticipated completions	0	0	0	30-40	30-40	30-40

Program Evaluation

Annual evaluation will include key performance indicators as follows (see also Appendix B):

1. Number of students recruited (applied) and number matriculated (enrolled)
2. Diversity of students matriculated and graduated.
3. Freshman class enrollment
4. Retention rate from freshman to sophomore year
5. Internship placement
6. Job placement within first year after graduation

The four- and five-year completion rates will be evaluated as available. A full external program review will be done in the 6th year of the program. A regularly scheduled curriculum review will ensure the program remains aligned with industry standards and career trends.

Appendices

Appendix A: Support Letters from Industry Leaders

Appendix B: Assessment Plan

Internal Attachments for the Office of the Provost

None.