



New Hampshire

Department of Education

Learn Everywhere Program Initial Application

1.0 Applicant Information [Ed 1403.01(a)(2)].

Organization Name: 4-H Youth Development Program, UNH Cooperative Extension

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2.0 Purpose, mission statement, or both [Ed 1403.01(b)(1)].

The mission of 4-H is to help youth acquire knowledge, develop life skills, and form attitudes to enable them to become self-directing, productive, and contributing members of society.

4-H emphasizes the importance of involving youth in the learning process. It is offered free of charge to youth ages 5-18. Youth from all cultural and economic backgrounds get involved in 4-H fun and learning. Members and volunteers live in towns, cities, farms, and suburbs.

Professional 4-H youth development educators located in each of New Hampshire's 10 counties provide subject matter support, volunteer management and event planning for the more than 20,000 school-aged youth involved in all aspects of the 4-H program. As part of a national organization, NH 4-H is focused on three priority areas: citizenship, healthy living, and science.

High quality 4-H program settings provide youth a place to belong, matter and explore their personal spark. High quality settings foster developmental relationships with youth, relationships that express care, challenge growth, and share power. These components help ensure that 4-H programs provide a nourishing developmental context – a place where youth can belong and grow.

High quality 4-H programs contribute to Positive Youth Development (PYD) through the intentional promotion of social, emotional, cognitive, and behavioral habits of mind. In the 4-H Thriving Model this process of PYD is described by seven indicators of thriving: Openness to challenge and discovery, growth mindset, hopeful purpose, pro-social orientation, transcendent awareness, positive emotionality, and self-regulation through goal setting and management.

Youth who experience high quality developmental settings in 4-H with an emphasis on these key social-emotional skills achieve key positive youth development outcomes, including academic motivation and success, social competence, high personal standards, connection with others, personal responsibility, and contribution to others through leadership and civic engagement.

Youth who achieve positive developmental outcomes are more likely to also achieve long-term outcomes marked by vocational or academic success, civic engagement, employability and economic stability and happiness and well-being.

3.0 A description of the demonstrated instructor qualifications required for the program(s) and a statement assuring that the instructor(s) satisfies those qualifications [Ed 1403.01(b)(3)].

The 4-H Youth Development team is comprised of specialists, educators, and screened volunteers with specific expertise in teaching and content area.

Extension Field Specialists: Master's level or higher in appropriate discipline.

4-H Program Manager/Educator: Bachelor's degree in relevant discipline, education, or human services.

4-H Screened Volunteer: Ability to complete UNH Volunteer screening process, believe in "positive" approach to youth development, ability to work and communicate with youth from diverse backgrounds, and ability to manage and reduce program risk for 4-H youth and adults.

UNHCE and the 4-H Youth Development Program will assure that the specialists, educators, and screened volunteers will meet the above minimum qualifications.

4.0 Either a criminal history records check policy that provides for an annually recurring records check or a one-time records check upon employment and includes a statement affirming that the sponsoring entity shall not allow instruction or student contact by a person who has been charged pending disposition for, or convicted of, any violation or attempted violation of any of the offenses outlined in RSA 189:13-a, V; or a statement that a criminal history records check policy is not included in the applicant's learn everywhere program.

The applicant shall also provide a statement assuring they will notify the parents, in writing, regarding its criminal records check policy prior to the enrollment of a student in the learn everywhere program. [Ed 1403.01(b)(4)].

Screening Procedures for UNHCE Staff: All UNHCE (4-H Youth Development) complete a comprehensive screening process which include interviews, reference checks and a criminal background check upon hire. All staff who work with youth must complete an updated criminal background check every three years.

Screening Procedures for New Hampshire 4-H Volunteers:

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- Prospective volunteer completes an application, and it is reviewed by 4-H staff.
- At least two reference forms completed by references (who are not family members) or by staff recording responses to the reference form questions asked in a telephone interview (this should be noted on reference form).
- An Interview is conducted using the 4-H Volunteer Interview Questions to provide information to the applicant as well as to further screen them as a possible volunteer leader. This should be face to face. Phone or video can be used only in special cases when applicant is already known well by 4-H staff. Applicants should receive an overview of UNHCE and the volunteer service description for the role(s) they are considering.
- A youth-specific background check must be obtained. Background Checks for Volunteers Working with Youth - Procedures for Staff are strictly followed.
- The applicant is required to complete an initial Orientation that is specific to the role they will be serving in.
- Applicant must (a) complete the UNH Protection of Minors for Staff and Volunteers and (b) be trained on Reducing Risk for 4-H Volunteers.
- The 4-H Volunteer Agreement Form is signed by both the applicant and hiring/supervising staff.
- Applicant will enroll in 4-H Online
- If all the above steps have been completed, a Letter of Appointment to the applicant is sent along with appropriate volunteer service description and a copy of their signed Volunteer Agreement. Upon issue of the letter of appointment, the person can have their enrollment 4-H-Online approved and is considered a volunteer of UNH Cooperative Extension. A copy of the Letter of Appointment is placed on file and can be shared with others as necessary.
- The decision to reject an applicant will be made jointly by the 4-H staff, their supervisor and 4-H program leadership if necessary. Following this decision, the 4-H staff sends a letter of rejection to the applicant signed by the staff and 4-H program leadership. This letter will be written for the individual; there is not a form letter.
- Every three years, the 4-H volunteer will have a youth-specific background check, complete the UNH Protection of Minors for Staff and Volunteers and be trained on Reducing Risk for 4-H Volunteers

The 4-H Youth Development Program assures it will notify the parents, in writing, regarding its criminal records check policy prior to the enrollment of a student in the Learn Everywhere program.

5.0 Identification of the required subject from Ed 306.27(v) for which students completing the learn everywhere program shall receive high school credit(s) [Ed 1403.01(e)(1)(a)].

Students that successfully complete the 4-H Livestock Science course shall be awarded a certificate for high school credit as an “Open Elective” as listed on Ed 306.27(v).

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6.0 An outline of each program for which approval is sought, which includes goals, competencies, a detailed description of the course of instruction, and a description of expected student outcomes [Ed 1403.01(e)(1)(b)].

4-H Livestock Science Course

Goals:






- Evaluate production animals and their behavior, health, and reproductive status. (dairy and beef cattle, meat and dairy goats, swine, sheep, rabbits, and poultry).
- Develop animal husbandry skills in an agricultural setting (ie. day-to day care, management, safety standards, production, nutrition, selective breeding, and the raising of animals).
- Compare the vocations in animal husbandry.
- Enhance leadership, public speaking, community service, and record-keeping skills.



Competencies:






1. Youth will demonstrate an understanding of the development and implications of animal origin, domestication and distribution on production practices and the environment by analyzing the historic and current trends impacting the animal systems industry.
2. Youth will demonstrate an understanding of management techniques that ensure animal welfare by *describing and demonstrating* best-practice protocols based upon animal behaviors for animal husbandry and welfare.
3. Youth will demonstrate an understanding of the nutritional needs of animals by *selecting and assessing* proper animal feed rations to achieve desired outcomes for performance, development, reproduction, and/or economic production.
4. Youth will demonstrate an understanding of animal breeding readiness and soundness by *applying* principles of animal reproduction to achieve desired outcomes for performance, development, and/or economic production.
5. Youth will demonstrate an understanding of animal housing, equipment, and handling facilities for the major systems of animal production by *evaluating* factors affecting animal performance and *implementing* procedures for enhancing performance and animal health.
6. Youth will demonstrate an understanding of selecting and training animals for specific purposes and maximum performance-based anatomy and physiology by evaluating animals based on anatomical and physiological characteristics.

7. Students will demonstrate an understanding of design programs to prevent animal disease, parasites and other conditions and ensure animal welfare by *describing* and *demonstrating* principles of biosecurity and effective animal health care.
8. Students will demonstrate an understanding of environmental factors associated with animal production, explaining the impact of the environment on animal production.
9. Students will demonstrate an understanding of different career pathways and options in animal science, *explaining* the required education and skills, and *developing* a professional development plan.
10. Students will demonstrate an understanding of the economics of animal production by *explaining and understanding* the expenses and profit potential of raising production animals.

These standards, from The National Council for Agricultural Education, satisfy the minimum standards for graduation credit.

 AS.01. Analyze historic and current trends impacting the animal systems industry.		
 AS.01.01. Evaluate the development and implications of animal origin, domestication and distribution on production practices and the environment.		
 Sample Measurement: The following sample measurement strands are provided to guide the development of measurable activities (at different levels of proficiency) to assess students' attainment of knowledge and skills related to the above performance indicator. The topics represented by each strand are not all-encompassing.		
AS.01.01.01.a. Identify and summarize the origin, significance, distribution and domestication of different animal species.	AS.01.01.01.b. Evaluate and describe characteristics of animals that developed in response to the animal's environment and led to their domestication.	AS.01.01.01.c. Evaluate the implications of animal adaptations on production practices and the environment.
AS.01.01.02.a. Research and summarize major components of animal systems (e.g., livestock, companion animal, etc.).	AS.01.01.02.b. Describe the historical and scientific developments of different animal industries and summarize the products, services and careers associated with each.	AS.01.01.02.c. Predict trends and implications of future developments within different animal industries on production practices and the environment.
 AS.01.02. Assess and select animal production methods for use in animal systems based upon their effectiveness and impacts.		
 Sample Measurement: The following sample measurement strands are provided to guide the development of measurable activities (at different levels of proficiency) to assess students' attainment of knowledge and skills related to the above performance indicator. The topics represented by each strand are not all-encompassing.		
AS.01.02.01.a. Identify and categorize terms and methods related to animal production (e.g., sustainable, conventional, humanely raised, natural, organic, etc.).	AS.01.02.01.b. Analyze the impact of animal production methods on end product qualities (e.g., price, sustainability, marketing, labeling, animal welfare, etc.).	AS.01.02.01.c. Evaluate the effectiveness of different production methods and defend the use of selected methods using data and evidence.
AS.01.02.02.a. Research and examine marketing methods for animal products and services (e.g., conventional, niche markets, locally grown, etc.).	AS.01.02.02.b. Calculate costs of marketing versus predicted increases in sales.	AS.01.02.02.c. Devise and evaluate marketing plans for an animal agriculture product or service.
AS.01.02.03.a. Summarize the types, purposes, and characteristics of effective record keeping and documentation practices for animal systems enterprises (e.g., managing records for animal identification, feeding, breeding, treatment, income/expense, etc.).	AS.01.02.03.b. Analyze and evaluate the accuracy and effectiveness of records used in an animal system business.	AS.01.02.03.c. Select and defend the use of a specific record management system based upon its effectiveness for a business related to animal systems.

AS.01.02.04.a. Identify and summarize wild-life management methods.	AS.01.02.04.b. Research and summarize local wildlife populations, challenges and ecological measures that are being utilized.	AS.01.02.04.c. Devise and evaluate plans to manage wildlife populations to achieve optimal ecological health.
 AS.01.03. Analyze and apply laws and sustainable practices to animal agriculture from a global perspective.		
 Sample Measurement: The following sample measurement strands are provided to guide the development of measurable activities (at different levels of proficiency) to assess students' attainment of knowledge and skills related to the above performance indicator. The topics represented by each strand are not all-encompassing.		
AS.01.03.01.a. Distinguish between the types of laws pertaining to animal systems.	AS.01.03.01.b. Analyze the structure of laws governing animal industries, international trade and animal production policies.	AS.01.03.01.c. Evaluate the impact of laws pertaining to animal agriculture (e.g., pros, cons, effect on individuals, effect on businesses, etc.) and assess the compliance of production practices with established regulations.
AS.01.03.02.a. Research and summarize sustainability in animal systems.	AS.01.03.02.b. Analyze the local and global impact of sustainable animal agriculture practices on human and environmental systems.	AS.01.03.02.c. Select, evaluate and defend the use of sustainable practices in animal agriculture.

 AS.02. Utilize best-practice protocols based upon animal behaviors for animal husbandry and welfare.		
 AS.02.01. Demonstrate management techniques that ensure animal welfare.		
 Sample Measurement: The following sample measurement strands are provided to guide the development of measurable activities (at different levels of proficiency) to assess students' attainment of knowledge and skills related to the above performance indicator. The topics represented by each strand are not all-encompassing.		
AS.02.01.01.a. Explain the implications of animal welfare and animal rights for animal systems.	AS.02.01.01.b. Design programs that assure the welfare of animals and prevent abuse or mistreatment.	AS.02.01.01.c. Implement and evaluate quality-assurance programs and procedures for animal production.
AS.02.01.02.a. Research and summarize the challenges involved in working with animals and resources available to overcome them (e.g., tools, technology, equipment, facilities, animal behavior signals, etc.).	AS.02.01.02.b. Analyze and document animal welfare procedures used to ensure safety and maintain low stress when moving and restraining animals.	AS.02.01.02.c. Devise, implement and evaluate safety procedures and plans for working with animals by species using information based on animal behavior and responses.
AS.02.01.03.a. Distinguish between animal husbandry practices that promote animal welfare and those that do not.	AS.02.01.03.b. Analyze and document animal husbandry practices and their impact on animal welfare.	AS.02.01.03.c. Devise economical recommendations to increase the welfare of animals in animal systems.
 AS.02.02. Analyze procedures to ensure that animal products are safe for consumption (e.g., use in food system, etc.).		
 Sample Measurement: The following sample measurement strands are provided to guide the development of measurable activities (at different levels of proficiency) to assess students' attainment of knowledge and skills related to the above performance indicator. The topics represented by each strand are not all-encompassing.		
AS.02.02.01.a. Identify and categorize tools, technology and equipment used in animal husbandry and welfare to help provide an abundant and safe food supply.	AS.02.02.01.b. Utilize tools, technology and equipment to perform animal husbandry and welfare tasks.	AS.02.02.01.c. Select, evaluate and defend the use of specific tools, technology or equipment used to perform animal husbandry and welfare tasks.
AS.02.02.02.a. Research and summarize animal production practices that may pose health risks.	AS.02.02.02.b. Analyze consumer concerns with animal production practices relative to human health.	AS.02.02.02.c. Research and evaluate programs to assure the safety of animal products for consumption.
AS.02.02.03.a. Identify and describe animal tracking systems used in animal systems (e.g., livestock, companion animal, exotics, etc.).	AS.02.02.03.b. Analyze and summarize the impact of animal trace-back capabilities on producers and consumers.	AS.02.02.03.c. Evaluate the effectiveness of animal and/or premise identification programs for a given species.

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 AS.03. Design and provide proper animal nutrition to achieve desired outcomes for performance, development, reproduction and/or economic production.		
 AS.03.01. Analyze the nutritional needs of animals.		
 Sample Measurement: The following sample measurement strands are provided to guide the development of measurable activities (at different levels of proficiency) to assess students' attainment of knowledge and skills related to the above performance indicator. The topics represented by each strand are not all-encompassing.		
AS.03.01.01.a. Identify and summarize essential nutrients required for animal health and analyze each nutrient's role in growth and performance.	AS.03.01.01.b. Differentiate between nutritional needs of animals in different growth stages and production systems (e.g., maintenance, gestation, natural, organic, etc.).	AS.03.01.01.c. Assess nutritional needs for an individual animal based on its growth stage and production system.
AS.03.01.02.a. Differentiate between nutritional needs of animal species.	AS.03.01.02.b. Correlate a species' nutritional needs to feedstuffs that could meet those needs.	AS.03.01.02.c. Design and defend the use of a nutritional program by demonstrating the relationship between the nutrient requirements and the feedstuffs provided.
 AS.03.02 Analyze feed rations and assess if they meet the nutritional needs of animals.		
 Sample Measurement: The following sample measurement strands are provided to guide the development of measurable activities (at different levels of proficiency) to assess students' attainment of knowledge and skills related to the above performance indicator. The topics represented by each strand are not all-encompassing.		
AS.03.02.01.a. Compare and contrast common types of feedstuffs and the roles they play in the diets of animals.	AS.03.02.01.b. Determine the relative nutritional value of feedstuffs by evaluating their general quality and condition.	AS.03.02.01.c. Select appropriate feedstuffs for animals based on a variety of factors (e.g., economics, digestive system and nutritional needs, etc.).
AS.03.02.02.a. Examine the importance of a balanced ration for animals based on the animal's growth stage (e.g., maintenance, newborn, gestation, lactation, etc.).	AS.03.02.02.b. Appraise the adequacy of feed rations using data from the analysis of feedstuffs, animal requirements and performance.	AS.03.02.02.c. Select and utilize animal feeds based on nutritional requirements, using rations for maximum nutrition and optimal economic production.
AS.03.02.03.a. Examine the purpose, impact and mode of action of feed additives and growth promotants in animal production	AS.03.02.03.b. Compare and contrast methods that utilize feed additives and growth promotants with production practices that do not, (e.g., organic versus conventional production methods).	AS.03.02.03.c. Make and defend decisions regarding whether to use feed additives and growth promotants after researching and considering scientific evidence, production system needs and goals, and input from industry professionals.
 AS.03.03 Utilize industry tools to make animal nutrition decisions.		
 Sample Measurement: The following sample measurement strands are provided to guide the development of measurable activities (at different levels of proficiency) to assess students' attainment of knowledge and skills related to the above performance indicator. The topics represented by each strand are not all-encompassing.		
AS.03.03.01.a. Identify and categorize tools and equipment used to meet animal nutrition needs and ensure an abundant and safe food supply.	AS.03.03.01.b. Utilize tools and equipment to perform animal nutrition tasks.	AS.03.03.01.c. Select, evaluate and defend the use of specific tools or equipment used to perform animal nutrition tasks.
AS.03.03.02.a. Examine and summarize the meaning of various components of feed labels and feeding directions.	AS.03.03.02.b. Analyze and apply information from a feed label and feeding directions to feed animals.	AS.03.03.02.c. Evaluate and summarize the potential impacts, positive and negative, of compliance and/or noncompliance with a feed label and feeding directions.
AS.03.03.03.a. Examine the use of technology to provide animal nutrition.	AS.03.03.03.b. Analyze technologies used to provide animal nutrition and summarize their potential benefits and consequences.	AS.03.03.03.c. Research and recommend technology improvements to provide proper nutrition to animals.




 AS.04. Apply principles of animal reproduction to achieve desired outcomes for performance, development and/or economic production.		
 AS.04.01. Evaluate animals for breeding readiness and soundness.		
 Sample Measurement: The following sample measurement strands are provided to guide the development of measurable activities (at different levels of proficiency) to assess students' attainment of knowledge and skills related to the above performance indicator. The topics represented by each strand are not all-encompassing.		
AS.04.01.01.a. Identify and categorize the male and female reproductive organs of the major animal species.	AS.04.01.01.b. Analyze the functions of major organs in the male and female reproductive systems.	AS.04.01.01.c. Select breeding animals based on characteristics of the reproductive organs.
AS.04.01.02.a. Compare and contrast how age, size, life cycle, maturity level and health status affect the reproductive efficiency of male and female animals.	AS.04.01.02.b. Assess and describe factors that lead to reproductive maturity.	AS.04.01.02.c. Evaluate and select animals for reproductive readiness.
AS.04.02.03.a. Summarize the importance of efficient and economic reproduction in animals.	AS.04.02.03.b. Evaluate reproductive problems that occur in animals.	AS.04.02.03.c. Treat or cull animals with reproductive problems.
 AS.04.02. Apply scientific principles to select and care for breeding animals.		
 Sample Measurement: The following sample measurement strands are provided to guide the development of measurable activities (at different levels of proficiency) to assess students' attainment of knowledge and skills related to the above performance indicator. The topics represented by each strand are not all-encompassing.		
AS.04.02.01.a. Summarize genetic inheritance in animals.	AS.04.02.01.b. Compare and contrast the use of genetically superior animals in the production of animals and animal products.	AS.04.02.01.c. Select and evaluate a breeding system based on the principles of genetics.
AS.04.02.02.a. Identify and summarize inheritance and terms related to inheritance in animal breeding (e.g., dominant, co-dominant, recessive, homozygous, heterozygous, etc.).	AS.04.02.02.b. Demonstrate how to determine probability trait inheritance in animals.	AS.04.02.02.c. Select and evaluate breeding animals and determine the probability of a given trait in their offspring.
AS.04.02.03.a. Identify and summarize genetic defects that affect animal performance	AS.04.02.03.b. Analyze how DNA analysis can detect genetic defects in breeding stock	AS.04.02.03.c. Perform a DNA analysis and use the data to make and defend breeding decisions.
AS.04.02.04.a. Identify and summarize different needs of breeding animals based on their growth stages (e.g., newborn, parturition, gestation, gestation lengths, etc.).	AS.04.02.04.b. Analyze the care needs for breeding stock in each stage of growth.	AS.04.02.04.c. Create a plan to differentiate care of a species of breeding animals throughout their growth stages.
 AS.04.03 Apply scientific principles to breed animals.		
 Sample Measurement: The following sample measurement strands are provided to guide the development of measurable activities (at different levels of proficiency) to assess students' attainment of knowledge and skills related to the above performance indicator. The topics represented by each strand are not all-encompassing.		
AS.04.03.01.a. Identify and categorize natural and artificial breeding methods (e.g., natural breeding, artificial insemination, estrous synchronization, flushing, cloning, etc.).	AS.04.03.01.b. Calculate the potential economic benefits of natural versus artificial breeding methods.	AS.04.03.01.c. Select animal breeding methods based on reproductive and economic efficiency.
AS.04.03.02.a. Analyze the materials, methods and processes of artificial insemination.	AS.04.03.02.b. Demonstrate artificial insemination techniques.	AS.04.03.02.c. Evaluate the implementation and effectiveness of artificial insemination techniques.
AS.04.03.03.a. Identify and summarize the advantages and disadvantages of major reproductive management practices, including estrous synchronization, superovulation, flushing and embryo transfer (e.g., cost, labor, equipment, etc.).	AS.04.03.03.b. Analyze the processes of major reproductive management practices, including estrous synchronization, superovulation, flushing and embryo transfer.	AS.04.03.03.c. Create and evaluate plans and procedures for estrous synchronization, superovulation, flushing, embryo transfer and other reproductive management practices.
AS.04.03.04.a. Examine the use of quantitative breeding values (e.g., EPDs, Performance records, pedigrees) in the selection of genetically superior breeding stock.	AS.04.03.04.b. Compare and contrast quantitative breeding value differences between genetically superior animals and animals of average genetic value.	AS.04.03.04.c. Select and assess animal performance based on quantitative breeding values for specific characteristics.





 AS.05. Evaluate environmental factors affecting animal performance and implement procedures for enhancing performance and animal health.		
 AS.05.01. Design animal housing, equipment and handling facilities for the major systems of animal production.		
 Sample Measurement: The following sample measurement strands are provided to guide the development of measurable activities (at different levels of proficiency) to assess students' attainment of knowledge and skills related to the above performance indicator. The topics represented by each strand are not all-encompassing.		
AS.05.01.01.a. Differentiate between the types of facilities needed to house and produce animal species safely and efficiently.	AS.05.01.01.b. Critique designs for an animal facility and prescribe alternative layouts and adjustments for the safe, sustainable and efficient use of the facility.	AS.05.01.01.c. Design an animal facility focusing on animal requirements, economic efficiency, sustainability, safety and ease of handling.
AS.05.01.02.a. Identify and summarize equipment, technology and handling facility procedures used in modern animal production (e.g., climate control devices, sensors, automation, etc.).	AS.05.01.02.b. Analyze the use of modern equipment, technology and handling facility procedures and determine if they enhance the safe, economic and sustainable production of animals.	AS.05.01.02.c. Select, use and evaluate equipment, technology and handling procedures to enhance sustainability and production efficiency.
 AS.05.02. Comply with government regulations and safety standards for facilities used in animal production.		
 Sample Measurement: The following sample measurement strands are provided to guide the development of measurable activities (at different levels of proficiency) to assess students' attainment of knowledge and skills related to the above performance indicator. The topics represented by each strand are not all-encompassing.		
AS.05.02.01.a. Identify and summarize the general standards that must be met in facilities for animal production (e.g., environmental, zoning, construction, etc.).	AS.05.02.01.b. Analyze animal facilities to determine if standards have been met.	AS.05.02.01.c. Evaluate facility designs and make recommendations to ensure that it meets standards for the legal, safe, ethical, economical and efficient production of animals.
AS.05.02.02.a. Distinguish between the types of laws and regulations pertaining to animal systems.	AS.05.02.02.b. Analyze the structure of laws pertaining to animal systems.	AS.05.02.02.c. Evaluate the impact of laws pertaining to animal systems.
 AS.06. Classify, evaluate and select animals based on anatomical and physiological characteristics.		
 AS.06.01. Classify animals according to taxonomic classification systems and use (e.g. agricultural, companion, etc.).		
 Sample Measurement: The following sample measurement strands are provided to guide the development of measurable activities (at different levels of proficiency) to assess students' attainment of knowledge and skills related to the above performance indicator. The topics represented by each strand are not all-encompassing.		

AS.06.01.01.a. Explain the importance of the binomial nomenclature system for classifying animals.	AS.06.01.01.b. Explain how animals are classified using a taxonomic classification system.	AS.06.01.01.c. Assess taxonomic characteristics and classify animals according to the taxonomic classification system.
AS.06.01.02.a. Compare and contrast major uses of different animal species (e.g., agricultural, companion, etc.).	AS.06.01.02.b. Appraise and evaluate the economic value of animals for various applications in the agriculture industry.	AS.06.01.02.c. Recommend different uses for an animal species based upon an analysis of local market needs.
AS.06.01.03.a. Identify and summarize common classification terms utilized in animal systems (e.g., external and internal body parts, maturity, mature male, immature female, animal products, breeds, etc.).	AS.06.01.03.b. Analyze the visual characteristics of an animal or animal product and select correct classification terminology when referring to companion and production animals.	AS.06.01.03.c. Apply knowledge of classification terms to communicate with others about animal systems in an effective and accurate manner.
 AS.06.02. Apply principles of comparative anatomy and physiology to uses within various animal systems.		
 Sample Measurement: The following sample measurement strands are provided to guide the development of measurable activities (at different levels of proficiency) to assess students' attainment of knowledge and skills related to the above performance indicator. The topics represented by each strand are not all-encompassing.		
AS.06.02.01.a. Research and summarize characteristics of a typical animal cell and identify the organelles.	AS.06.02.01.b. Analyze the functions of each animal cell structure.	AS.06.02.01.c. Correlate the functions of animal cell structures to animal growth, development, health and reproduction.
AS.06.02.02.a. Examine the basic functions of animal cells in animal growth and reproduction.	AS.06.02.02.b. Analyze the processes of meiosis and mitosis in animal growth, development, health and reproduction.	AS.06.02.02.c. Apply the processes of meiosis and mitosis to solve animal growth, development, health and reproductive problems.
AS.06.02.03.a. Identify and summarize the properties, locations, functions and types of animal cells, tissues, organs and body systems.	AS.06.02.03.b. Compare and contrast animal cells, tissues, organs, body systems types and functions among animal species.	AS.06.02.03.c. Apply knowledge of anatomical and physiological characteristics of animals to make production and management decisions.
 AS.06.03. Select and train animals for specific purposes and maximum performance based on anatomy and physiology.		
 Sample Measurement: The following sample measurement strands are provided to guide the development of measurable activities (at different levels of proficiency) to assess students' attainment of knowledge and skills related to the above performance indicator. The topics represented by each strand are not all-encompassing.		
AS.06.03.01.a. Identify and summarize how an animal's health can be affected by anatomical and physiological disorders.	AS.06.03.01.b. Compare and contrast desirable anatomical and physiological characteristics of animals within and between species.	AS.06.03.01.c. Evaluate and select animals to maximize performance based on anatomical and physiological characteristics that affect health, growth and reproduction
AS.06.03.02.a. Evaluate an animal against its optimal anatomical and physiological characteristics.	AS.06.03.02.b. Compare and contrast procedures to sustainably and efficiently develop an animal to reach its highest performance potential with respect to its anatomical and physiological characteristics.	AS.06.03.02.c. Choose, implement and evaluate sustainable and efficient procedures (e.g., selection, housing, nutrition and management) to produce consistently high-quality animals that are well suited for their intended purposes.
AS.06.03.03.a. Research and summarize the use of products and by-products derived from animals.	AS.06.03.03.b. Evaluate and select products from animals based on industry standards.	AS.06.03.03.c. Evaluate and select animals to produce superior animal products based on industry standards.

 AS.07. Apply principles of effective animal health care.		
 AS.07.01. Design programs to prevent animal diseases, parasites and other disorders and ensure animal welfare.		
 Sample Measurement: The following sample measurement strands are provided to guide the development of measurable activities (at different levels of proficiency) to assess students' attainment of knowledge and skills related to the above performance indicator. The topics represented by each strand are not all-encompassing.		
AS.07.01.01.a. Identify and summarize specific tools and technology used in animal health management.	AS.07.01.01.b. Describe and demonstrate the proper use and function of specific tools and technology related to animal health management.	AS.07.01.01.c. Select and use tools and technology to meet specific animal health management goals.
AS.07.01.02.a. Explain methods of determining animal health and disorders.	AS.07.01.02.b. Perform simple health-check evaluations on animals and practice basic emergency response procedures related to animals.	AS.07.01.02.c. Determine when an animal health concern needs to be referred to an animal health professional.
AS.07.01.03.a. List and summarize the characteristics of wounds, common diseases, parasites and physiological disorders that affect animals.	AS.07.01.03.b. Identify and describe common illnesses and disorders of animals based on symptoms and problems caused by wounds, diseases, parasites and physiological disorders.	AS.07.01.03.c. Treat common diseases, parasites and physiological disorders of animals according to directions prescribed by an animal health professional.
AS.07.01.04.a. Identify and summarize characteristics of causal agents and vectors of diseases and disorders in animals.	AS.07.01.04.b. Research and analyze data to evaluate preventive measures for controlling and limiting the spread of diseases, parasites and disorders among animals.	AS.07.01.04.c. Design and implement a health maintenance and a disease and disorder prevention plan for animals in their natural and/or confined environments.
AS.07.01.05.a. Explain the clinical significance of common veterinary methods and treatment (e.g., aseptic techniques, antibiotic use, wound management, etc.).	AS.07.01.05.b. Assess the safety and effectiveness of facilities and equipment used for surgical and nonsurgical veterinary treatments and procedures.	AS.07.01.05.c. Identify and describe surgical and nonsurgical veterinary treatments and procedures to meet specific animal health care objectives.
 AS.07.02. Analyze biosecurity measures utilized to protect the welfare of animals on a local, state, national, and global level.		
 Sample Measurement: The following sample measurement strands are provided to guide the development of measurable activities (at different levels of proficiency) to assess students' attainment of knowledge and skills related to the above performance indicator. The topics represented by each strand are not all-encompassing.		
AS.07.02.01.a. Summarize the importance of biosecurity to the animal industry at multiple levels (e.g., local, state, national, global).	AS.07.02.01.b. Analyze procedures at the local, state and national levels to ensure biosecurity of the animal industry.	AS.07.02.01.c. Design and evaluate a biosecurity plan for an animal production operation.
AS.07.02.02.a. Identify and describe zoonotic diseases including their historical significance and potential future implications.	AS.07.02.02.b. Analyze the health risk of different zoonotic diseases to humans and identify prevention methods.	AS.07.02.02.c. Research and evaluate the effectiveness of zoonotic disease prevention methods and procedures to identify those that are best suited to ensure public safety and animal welfare.
 AS.08. Analyze environmental factors associated with animal production.		
 AS.08.01. Design and implement methods to reduce the effects of animal production on the environment.		
 Sample Measurement: The following sample measurement strands are provided to guide the development of measurable activities (at different levels of proficiency) to assess students' attainment of knowledge and skills related to the above performance indicator. The topics represented by each strand are not all-encompassing.		
AS.08.01.01.a. Identify and summarize the effects of animal agriculture on the environment (e.g., waste disposal, carbon footprint, air quality, environmental efficiencies, etc.).	AS.08.01.01.b. Assess the effectiveness of methods of reducing the effects of animal agriculture on the environment.	AS.08.01.01.c. Devise a plan that includes measures to reduce the impact of animal agriculture on the environment.

 AS.08.02. Evaluate the effects of environmental conditions on animals and create plans to ensure favorable environments for animals.		
 Sample Measurement: The following sample measurement strands are provided to guide the development of measurable activities (at different levels of proficiency) to assess students' attainment of knowledge and skills related to the above performance indicator. The topics represented by each strand are not all-encompassing.		
AS.08.02.01.a. Research and summarize environmental conditions that impact animals (e.g., weather, sources of water, food resources, etc.).	AS. 08.02.01.b. Critique the reliability and validity of evidence presented to support claims regarding the effects of environmental conditions on animal populations and performance (e.g., population changes, emerging species, extinction, etc.).	AS. 08.02.01.c. Apply valid and reliable research evidence to predict the potential effects of different environmental conditions for an animal population.
AS.08.02.01.a. Identify and summarize methods for ensuring optimal environmental conditions for animals.	AS.08.02.02.b. Implement and evaluate the effectiveness of methods to ensure optimal environmental conditions for animals.	AS.08.02.02.c. Devise and improve plans to establish favorable environmental conditions for animal growth and performance based on a variety of factors (e.g., economic feasibility, environmental sustainability, impact on animals, etc.).

 ABS.02. Use record keeping to accomplish AFNR business objectives, manage budgets and comply with laws and regulations.		
 ABS.02.01. Apply fundamental accounting principles, systems, tools and applicable laws and regulations to record, track and audit AFNR business transactions (e.g., accounts, debits, credits, assets, liabilities, equity, etc.).		
 Sample Measurement: The following sample measurement strands are provided to guide the development of measurable activities (at different levels of proficiency) to assess students' attainment of knowledge and skills related to the above performance indicator. The topics represented by each strand are not all-encompassing.		
ABS.02.01.01.a. Examine and describe accounting systems and procedures used for record keeping in AFNR businesses (e.g., cash vs. accrual systems, identification of appropriate accounts, double-entry accounting, entry of debits and credits, etc.).	ABS.02.01.01.b. Evaluate the implementation and appropriateness of accounting systems and procedures used for record keeping in AFNR businesses	ABS.02.01.01.c. Select appropriate accounting systems and develop accounting procedures to maintain records for AFNR businesses
ABS.02.01.02.a. Research and summarize the features of different tools and services for recording, tracking and auditing AFNR business transactions (e.g., electronic tools, paper-based tools, consultative services, on-line services, banking services, etc.).	ABS.02.01.02.b. Compare and contrast the benefits and limitations of different tools and services for recording, tracking, and auditing AFNR business transactions (e.g., convenience, costs, data security, etc.).	ABS.02.01.02.c. Recommend and select tools and services to track, record and audit AFNR business transactions that meet business needs and priorities (e.g., electronic and paper based systems, etc.).
ABS.02.01.03.a. Research and examine the implications of applicable laws and regulations related to recording, tracking and auditing AFNR business transactions (e.g., Generally Accepted Accounting Principles, data security, etc.).	ABS.02.01.03.b. Predict and calculate the consequences of non-compliance with laws and regulations related to recording, tracking and auditing accounting information in AFNR businesses.	ABS.02.01.03.c. Assess the degree to which AFNR accounting practices comply with laws and regulations related to recording, tracking and auditing accounting information in AFNR businesses.

 ABS.02.02. Assemble, interpret and analyze financial information and reports to monitor AFNR business performance and support decision-making (e.g., income statements, balance sheets, cash-flow analysis, inventory reports, break-even analysis, return on investment, taxes, etc.).		
 Sample Measurement: The following sample measurement strands are provided to guide the development of measurable activities (at different levels of proficiency) to assess students' attainment of knowledge and skills related to the above performance indicator. The topics represented by each strand are not all-encompassing.		
ABS.02.02.01.a. Compare and contrast the different types of financial reports (e.g., income statements, cash flow statements, equity statements, etc.) and their frequency of use (e.g., daily, weekly, monthly, quarterly, annual) for monitoring AFNR business performance.	ABS.02.02.01.b. Prepare and interpret financial reports to describe the performance of AFNR businesses (e.g., efficiency, profitability, net worth, financial ratios, working capital ratio, leverage, etc.).	ABS.02.02.01.c. Recommend appropriate financial reports to assemble to support specific AFNR business decisions (e.g., evaluating efficiency, profitability, net worth, financial ratios, etc.).
ABS.02.02.02.a. Research and summarize strategies for tracking, reporting and managing inventory in AFNR businesses (e.g., spreadsheets, databases, word processing, networked systems and the Internet, etc.).	ABS.02.02.02.b. Use accounting information to prepare financial reports associated with inventory in AFNR businesses (e.g., cost of goods sold, margins on goods, etc.).	ABS.02.02.02.c. Create recommendations to improve management of inventory in AFNR businesses (e.g., maintaining optimal levels, calculating costs of carrying input and output inventory, supply chain management, etc.).
ABS.02.02.03.a. Define and classify different types of taxes that may be paid by AFNR businesses (e.g., income, property, sales, employment, estate, etc.).	ABS.02.02.03.b. Analyze and describe reporting requirements for different types of taxes paid by AFNR businesses (e.g., income, property, sales, employment, etc.).	ABS.02.02.03.c. Assemble financial information to prepare tax filings for AFNR businesses.
 CRP.10. Plan education and career path aligned to personal goals. Career-ready individuals take personal ownership of their own educational and career goals, and they regularly act on a plan to attain these goals. They understand their own career interests, preferences, goals and requirements. They have perspective regarding the pathways available to them and the time, effort, experience and other requirements to pursue each, including a path of entrepreneurship. They recognize the value of each step in the educational and experiential process, and they recognize that nearly all career paths require ongoing education and experience. They seek counselors, mentors and other experts to assist in the planning and execution of career and personal goals.		
 CRP.10.01. Identify career opportunities within a career cluster that match personal interests, talents, goals and preferences.		

 Sample Measurement: The following sample measurement strands are provided to guide the development of measurable activities (at different levels of proficiency) to assess students' attainment of knowledge and skills related to the above performance indicator. The topics represented by each strand are not all-encompassing.		
CRP.10.01.01.a. Determine personal interests, talents, goals and preferences for potential careers.	CRP.10.01.01.b. Assess and select areas for growth and improvement based upon analysis of personal interests for potential careers.	CRP.10.01.01.c. Plan a career path based on personal interests, goals, talents and preferences.
CRP.10.01.02.a. Examine career clusters and identify potential career opportunities based on personal interests, talents, goals and preferences.	CRP.10.01.02.b. Analyze skills needed for potential careers and compare and contrast skills needed with personal interests, talents, goals and preferences.	CRP.10.01.02.c. Match potential career opportunities in career clusters with personal interests, talents, goals and preferences.
 CRP.10.02. Examine career advancement requirements (e.g., education, certification, training, etc.) and create goals for continuous growth in a chosen career.		
 Sample Measurement: The following sample measurement strands are provided to guide the development of measurable activities (at different levels of proficiency) to assess students' attainment of knowledge and skills related to the above performance indicator. The topics represented by each strand are not all-encompassing.		
CRP.10.02.01.a. Categorize career advancement requirements for potential careers (e.g., degrees, certification, training, etc.).	CRP.10.02.01.b. Analyze the steps to meet career advancement requirements for potential careers.	CRP.10.02.01.c. Devise and implement plans to complete the requirements for career advancement.
CRP.10.02.02.a. Identify methods for setting goals for personal improvement and continuous growth in a career area (e.g., SMART goals, training, professional development, etc.).	CRP.10.02.02.b. Create goals for personal improvement and continuous growth in a career area.	CRP.10.02.02.c. Evaluate actions taken and make appropriate modifications to continuous growth goals in career areas.
 CRP.10.03. Develop relationships with and assimilate input and/or advice from experts (e.g., counselors, mentors, etc.) to plan career and personal goals in a chosen career area.		
 Sample Measurement: The following sample measurement strands are provided to guide the development of measurable activities (at different levels of proficiency) to assess students' attainment of knowledge and skills related to the above performance indicator. The topics represented by each strand are not all-encompassing.		
CRP.10.03.01.a. Summarize ways that input and/or advice from career area experts could assist in planning personal career goals.	CRP.10.03.01.b. Assess career and personal goals and determine additional information career area experts could provide.	CRP.10.03.01.c. Devise strategies to gather answers and information from career area experts and use this information to plan and execute goals.
CRP.10.03.02.a. Identify trusted individuals to consult with on setting and achieving career and personal goals (e.g., counselors, teachers, mentors, coaches, community leaders, etc.).	CRP.10.03.02.b. Devise and implement strategies to gather input and advice for planning career and personal goals from trusted experts.	CRP.10.03.02.c. Assimilate input and advice from experts and formulate plans to implement into career and personal goals for chosen career areas.
 CRP.10.04. Identify, prepare, update and improve the tools and skills necessary to pursue a chosen career path.		
 Sample Measurement: The following sample measurement strands are provided to guide the development of measurable activities (at different levels of proficiency) to assess students' attainment of knowledge and skills related to the above performance indicator. The topics represented by each strand are not all-encompassing.		
CRP.10.04.01.a. Identify and explain the purpose of fundamental tools used to pursue a career path (e.g., resume, cover letter, portfolio, etc.) as well as the common components of each (e.g., content in cover letter, categories in resume, etc.).	CRP.10.04.01.b. Organize personal information (e.g., goals, experiences, education, achievements, work examples, etc.) to prepare and continuously update a set of tools to aid in the pursuit of a career path.	CRP.10.04.01.c. Select and use appropriate tools to pursue career advancement opportunities and assimilate feedback from the process to identify improvements for the future.
CRP.10.04.02.a. Summarize common processes involved in pursuing a career (e.g., interviews, applications, networking, etc.) and the appropriate tools used for completing each.	CRP.10.04.02.b. Examine and practice the skills needed to complete common processes for pursuing a career (e.g., ability to communicate about past experiences, ability to articulate one's goals and career objectives, etc.).	CRP.10.04.02.c. Apply skills to complete common processes involved in pursuing a career and assimilate input and feedback from experts (e.g., mentors, teachers, business persons, etc.) to improve.

<https://thecouncil.ffa.org/afnr/>

Course Instruction:

Student participants are evaluated by mentors with subject matter expertise in the subject area for which the student is being evaluated. There are a variety of methods through which students can demonstrate mastery.

- Some assessments allow students to verbally describe their knowledge
- The use of artifacts created by the youth will be acceptable
- Mentor observation of individual tasks can be included
- Mentors will use both the student competency profile and corresponding rubrics (See 7.0) to assess students’ mastery of the competency.

Expected Student Outcomes:

- Evaluate animals and their behavior, health, and reproduction.
- Describe and demonstrate animal husbandry skills (ie. day-to day care, management, safety standards, production, nutrition, selective breeding, and the raising of livestock).
- Compare the vocations in animal husbandry.
- Develop leadership, public speaking, community service, and record-keeping skills.

7.0 A plan for recording student progress in meeting expected student outcomes for each course of instruction [Ed 1403.01(e)(1)(c)].

Student progress can be measured and recorded in a variety of different ways utilizing rubrics which will align with the National Council for Agricultural Education Standards.

4-H Livestock Science Student Progress Report

Student:		Date:			
Competency	Related Outcome (measurable) Methodology?	Proficiency Score Level 1-3	Strengths	Challenges	Opportunities And Recommendations
#1. Youth will demonstrate an understanding of the development and implications of animal origin, domestication and distribution on production practices and the environment by analyzing the historic and current trends impacting the animal systems industry.	Youth can evaluate animal origin, domestication, and distribution on production practices and the environment.				
	Youth can assess and select animal production methods for us in animal systems.				

	Youth can analyze and apply laws and sustainable practices to animal agriculture.				
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#2. Youth will demonstrate an understanding of management techniques that ensure animal welfare by describing and demonstrating best-practice protocols based upon animal behaviors for animal husbandry and welfare.	Youth can demonstrate management techniques that ensure animal welfare.				
	Youth can analyze procedures to ensure that animal products are safe for consumption.				
#3. Youth will demonstrate an understanding of the nutritional needs of animals by selecting and assessing proper animal feed rations to achieve desired outcomes for performance, development, reproduction, and/or economic production.	Youth can analyze the nutritional needs of animals.				
	Youth can analyze the feed rations and assess if they meet the nutritional needs of animals.				
	Youth can utilize the industry tools to make animal nutrition decisions.				
#4. Youth will demonstrate an understanding of animal breeding readiness and soundness by applying principles of animal reproduction to achieve desired outcomes for performance, development, and/or economic production.	Youth can evaluate animals for breeding readiness and soundness.				
	Youth can apply scientific principles to select and care for breeding animals.				

	Youth can apply scientific principles to breed animals.				
#5. Youth will demonstrate an understanding of animal housing, equipment, and handling facilities for the major systems of animal production by evaluating factors affecting animal performance and implementing procedures for enhancing performance and animal health.	Youth can design animals housing equipment, and handling facilities for the major systems of animal production.				
	Youth can comply with government regulations and safety standards for facilities used to animal production.				
#6. Youth will demonstrate an understanding of selecting and training animals for specific purposes and maximum performance-based anatomy and physiology by evaluating animals based on anatomical and physiological characteristics.	Youth can classify animals according to taxonomic classification systems and use.				
	Youth can apply principles of comparative autonomy and physiology to uses within various animal systems.				
	Youth can select and train animals for specific purposes and maximum performance based on anatomy and physiology.				
#7. Students will demonstrate an understanding of design programs to prevent animal disease, parasites and other conditions and ensure animal welfare by describing and demonstrating principles of	Youth can design programs to prevent animal diseases, parasites, and other disorders and ensure animal welfare.				

biosecurity and effective animal health care.	Youth can analyze biosecurity measures utilized to protect the welfare of animals on a local, state, national, and global level.				
#8. Students will demonstrate an understanding of environmental factors associated with animal production, explaining the impact of the environment on animal production.	Youth can design and implement methods to reduce the effects of animal production on the environment.				
	Youth can evaluate the effects of environmental conditions on animals and create plans to ensure favorable environments for animals.				
#9. Students will demonstrate an understanding of different career pathways and options in animal science, <i>explaining</i> the required education and skills, and <i>developing</i> a professional development plan.	Youth can identify career opportunities related to animal science that match personal interests, goals, and preference.				
	Youth can examine career advancement requirements (e.g., education, certification, training, etc.) and create goals for continuous growth in a chosen career.				
	Youth can identify, prepare, update, and improve the tools necessary to pursue a chosen career path.				

#10. Students will demonstrate an understanding of the economics of animal production by explaining and understanding the expenses and profit potential of raising production animals.	Youth can write and evaluate business goals.				
	Youth can record and track business objectives.				
	Youth can develop, assess, and manage a budget.				

* Level 1 (Beginning): The student is beginning competency outcome attainment; Level 2 (Meeting): The student is meeting competency outcome attainment; Level 3 (Exceeding): The student is exceeding competency outcome attainment.

- 1. Instructor observation of project-based learning, including off-site learning projects;**
- 2. Competency-based or performance-based assessments;**
- 3. Instructor observations of student performance;**
- 4. Project evaluation rubrics used to evaluate program proficiencies; and**
- 5. Other assessment approaches as determined by the applicant's learn everywhere program**

[Ed 1403.01(e)(1)(d)].

The youth's learning outcomes will be assessed using a competency-based assessment rubric. Assessment is an on-going process. Assessment methods are information, evidence, and/or data and will be collected to determine the extent to which youth are meeting learning outcomes. Youth will present an artifact (examples listed above) along with a reflection to their UNHCE mentor to demonstrate competency for each learning outcome. The mentor will discuss the artifact, reflection, and competency with the youth. Then, the mentor will determine if the youth is beginning, meeting, or exceeding the competency. The youth can continue working on the competency until they met the competency.

9.0 The number of credits the program will fulfill [Ed 1403.01(e)(1)(e)].

Students that demonstrate required competency in 4-H Livestock Science will be awarded a certificate for 1.0 credit (10 competencies)

10.0 A description of the competency-based grading system [Ed 1403.01(e)(1)(f)].

A rubric will be used to evaluate learning outcomes using the following grading system: Level 1 (Beginning): The student is beginning competency outcome attainment; Level 2 (Meeting): The student is meeting competency outcome attainment; Level 3 (Exceeding): The student is exceeding competency outcome attainment.

4-H Livestock Program Outcome Assessment Rubric			
Learning Outcome	Level 1	Level 2	Level 3
Competency #1			
Youth can evaluate animal origin, domestication, and distribution on production practices and the environment.	Youth is beginning to evaluate animal origin, domestication, and distribution on production practices.	Youth can evaluate animal origin, domestication, and distribution on production practices and the environment.	Youth are proficient at evaluating animal origin, domestication, and distribution on production practices and the environment.
Youth can assess and select animal production methods for us in animal systems.	Youth is beginning to assess and select animal production methods.	Youth can assess and select animal production methods for us in animal systems.	Youth show an exceptional understanding of assessing and selecting animal production methods for us in animal systems.
Youth can analyze and apply laws and sustainable practices to animal agriculture.	Youth is beginning to analyze and apply laws and sustainable practices to animal agriculture.	Youth can analyze and apply laws and sustainable practices to animal agriculture.	Youth show an exceptional ability to analyze and apply multiple laws and multiple sustainable practices to animal agriculture.
Competency #2			
Youth can demonstrate management techniques that ensure animal welfare.	Youth is beginning to demonstrate management techniques that ensure animal welfare.	Youth can demonstrate management techniques that ensure animal welfare.	Youth show an exceptional ability to demonstrate numerous management techniques that ensure optimal animal welfare.
Youth can analyze procedures to ensure that animal products are safe for consumption.	Youth is beginning to analyze procedures to ensure that animal products are safe for consumption.	Youth can analyze procedures to ensure that animal products are safe for consumption.	Youth show an exceptional ability to analyze multiple procedures to ensure that animal products are safe for consumption.
Competency #3			
Youth can analyze the nutritional needs of animals.	Youth is beginning to analyze the nutritional needs of animals.	Youth can analyze the nutritional needs of animals.	Youth are exceptional at analyzing the nutritional needs of animals.
Youth can analyze the feed rations and assess if they meet the nutritional needs of animals.	Youth is beginning to analyze the feed rations and assess if they meet the nutritional needs of animals.	Youth can analyze the feed rations and assess if they meet the nutritional needs of animals.	Youth are exceptional at analyzing the feed rations and assessing if they meet the nutritional needs of animals in more than one species.
Youth can utilize the industry tools to make animal nutrition decisions.	Youth is beginning to utilize the industry tools to make animal nutrition decisions.	Youth can utilize the industry tools to make animal nutrition decisions.	Youth are exceptional at utilizing several industry tools to make animal nutrition decisions.

Competency #4			
Youth can evaluate animals for breeding readiness and soundness.	Youth is beginning to evaluate animals for breeding readiness and soundness.	Youth can evaluate animals for breeding readiness and soundness.	Youth are exceptional at evaluating animals for breeding readiness and soundness.
Youth can apply scientific principles to select and care for breeding animals.	Youth is beginning to apply scientific principle to select and care for breeding animals.	Youth can apply scientific principles to select and care for breeding animals.	Youth are exceptional at applying scientific principles to select and care for breeding animals.
Youth can apply scientific principles to breed animals.	Youth is beginning to apply scientific principles to breed animals.	Youth can apply scientific principles to breed animals.	Youth is exceptional at applying scientific principles to breed animals.
Competency #5			
Youth can design animals housing equipment, and handling facilities for the major systems of animal production.	Youth is beginning to design animals housing equipment, and handling facilities for the major systems of animal production.	Youth can design animals housing equipment, and handling facilities for the major systems of animal production.	Youth is exceptional at designing animal housing equipment, and handling facilities for the major systems of animal production.
Youth can comply with government regulations and safety standards for facilities used to animal production.	Youth is beginning to comply with government regulations and safety standards for facilities used to animal production.	Youth can comply with government regulations and safety standards for facilities used to animal production.	Youth is exceptional at complying with government regulations and safety standards for facilities used to animal production.
Competency #6			
Youth can classify animals according to taxonomic classification systems and use.	Youth is beginning to classify animals according to taxonomic classification systems and use.	Youth can classify animals according to taxonomic classification systems and use.	Youth is exceptional at classifying animals according to taxonomic classification systems and use.
Youth can apply principles of comparative autonomy and physiology to uses within various animal system.	Youth is beginning to apply principles of comparative autonomy and physiology to uses within various animal system.	Youth can apply principles of comparative autonomy and physiology to uses within various animal system.	Youth is exceptional at applying principles of comparative autonomy and physiology to uses within various animal system.
Youth can select and train animals for specific purposes and maximum performance based on anatomy and physiology.	Youth is beginning to select and train animals for specific purposes and maximum performance based on anatomy and physiology.	Youth can select and train animals for specific purposes and maximum performance based on anatomy and physiology.	Youth is exceptional at selecting and training animals for specific purposes and maximum performance based on anatomy and physiology.

Competency #7			
Youth can design programs to prevent animal diseases, parasites, and other disorders and ensure animal welfare.	Youth is beginning to design programs to prevent animal diseases, parasites, and other disorders and ensure animal welfare.	Youth can design programs to prevent animal diseases, parasites, and other disorders and ensure animal welfare.	Youth is exceptional at designing programs to prevent animal diseases, parasites, and other disorders and ensure animal welfare.
Youth can analyze biosecurity measures utilized to protect the welfare of animals on a local, state, national, and global level.	Youth is beginning to analyze biosecurity measures utilized to protect the welfare of animals on a local, state, national, and global level.	Youth can analyze biosecurity measures utilized to protect the welfare of animals on a local, state, national, and global level.	Youth is exceptional at analyzing biosecurity measures utilized to protect the welfare of animals on a local, state, national, and global level.
Competency #8			
Youth can design and implement methods to reduce the effects of animal production on the environment.	Youth is beginning to design and implement methods to reduce the effects of animal production on the environment.	Youth can design and implement methods to reduce the effects of animal production on the environment.	Youth is exceptional at designing and implementing methods to reduce the effects of animal production on the environment.
Youth can evaluate the effects of environmental conditions on animals and create plans to ensure favorable environments for animals.	Youth is beginning to evaluate the effects of environmental conditions on animals and create plans to ensure favorable environments for animals.	Youth can evaluate the effects of environmental conditions on animals and create plans to ensure favorable environments for animals.	Youth is exceptional at evaluating the effects of environmental conditions on animals and create plans to ensure favorable environments for animals.
Competency #9			
Youth can identify career opportunities related to animal science that match personal interests, goals, and preference.	Youth is beginning to identify career opportunities related to animal science that match personal interests, goals, and preference.	Youth can identify at least three career opportunities related to animal science that match personal interests, goals, and preference.	Youth can identify at least five career opportunities related to animal science that match personal interests, goals, and preference.
Youth can examine career advancement requirements (e.g., education, certification, training, etc.) and create goals for continuous growth in a chosen career.	Youth is beginning to examine career advancement requirements (e.g., education, certification, training, etc.) and create goals for continuous growth in a chosen career.	Youth can examine career advancement requirements (e.g., education, certification, training, etc.) and create goals for continuous growth in a chosen career.	Youth is exceptional at examining career advancement requirements (e.g., education, certification, training, etc.) and create goals for continuous growth in a chosen career.
Youth can identify, prepare, update, and improve the tools necessary to pursue a chosen career path.	Youth is beginning to identify, prepare, update, and improve the tools necessary to pursue a chosen career path.	Youth can identify, prepare, update, and improve the tools necessary to pursue a chosen career path.	Youth is exceptional at identifying, preparing, updating, and improving the tools necessary to pursue a chosen career path.

Competency #10			
Youth can write and evaluate business goals.	Youth is beginning to write and evaluate business goals.	Youth can write and evaluate two to three business goals.	Youth can write and evaluate three to five business goals.
Youth can record and track business objectives.	Youth is beginning to record and track business objectives.	Youth can record and track two to three business objectives.	Youth can record and track three to five business objectives.
Youth can develop, assess, and manage a budget.	Youth beginning to develop, assess, and manage a budget.	Youth develop, assess, and manage a budget.	Youth will develop, assess, and manage a budget and make appropriate changes to the budget.

11.0 A description of methods for admission which shall not be designed, intended, or used to discriminate or violate individual civil rights in any manner prohibited by law [Ed 1403.01(e)(2)(a)].

The University of New Hampshire Cooperative Extension is an equal opportunity educator and employer. UNH, U.S. Dept. of Agriculture, and New Hampshire counties cooperating. Our programs and policies are consistent with pertinent Federal and State laws and regulations prohibiting discrimination on the basis of race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, familial/parental status, income derived from a public assistance program, political beliefs, reprisal or retaliation for prior civil rights activity.

Program information may be made available in languages other than English. Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotape, and American Sign Language) should contact UNH Extension’s main office at (603) 862-0806 or USDA’s TARGET Center at (202) 720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339.

To participate in Learn Everywhere, the youth shall first enroll in the NH 4-H Youth Development Program and then connect with a 4-H Staff Member. The youth will then fill out an Intent to Participate. The form shall be signed by the youth, the parent/guardian, and the 4-H Staff Member. The youth does not need to identify a Mentor when filing the Intent to Participate. The 4-H Staff Member may help the youth identify a Mentor. The Mentor must either be a screened 4-H Volunteer or become screened as a 4-H Volunteer BEFORE mentoring the youth.

12.0 A description of how the program will liaison with the local education agency (LEA) for students with an education plan pursuant to section 504 of the Rehabilitation Act [Ed 1403.01(e)(2)(b)].

The University of New Hampshire Cooperative Extension is an equal opportunity educator and employer. University of New Hampshire, U.S. Department of Agriculture and N.H. counties cooperating.

At the time of enrollment, NH 4-H Youth Development Program (4-H YDP) offers parents the opportunity to disclose any information regarding ongoing 504 education plan related accommodations and modifications required for their child. With the parent's permission, 4-H YDP will contact the student's Local Education Agency (LEA) to coordinate recommended 504 accommodations and/or modifications in the 4-H programs. Although 4-H's staff, volunteers, and instructors are not explicitly certified to work with students with 504 plans, they are caring, patient and compassionate and can work with the student's LEA representative to understand how to implement recommended accommodations and/or modifications. If 4-H YDP determines it is unable to provide the required accommodations and/or modifications for a student, the parents will be informed before committing to enrolling their child in an 4-H YDP program.

13.0 A description of how the program will liaison with the LEA for a student with disabilities, consistent with the student's IEP to include, but not be limited to coordinating

- 1. Required special education programs;**
- 2. Support services; and**
- 3. Least restrictive environment.**

[Ed 1403.01(e)(2)(c)].

NH 4-H Youth Development Program (4-H YDP) gives all parents the opportunity to disclose any sorts of disabilities, including any related Individualized Education Program (IEPs). If requested, 4-H YDP will work with the parent to contact the student's Local Education Agency (LEA) to assist in the coordination of the student's IEP to include, but not be limited to, the required special education programs, support services, and least restrictive environment. At the parent's request, a 4-H YDP representative will participate in IEP team meetings that discuss revisions to the student's IEP needed to participate in a 4-H program. 4-H YDP will also coordinate with the LEA in fulfilling the LEA's responsibility to provide any special education, related services, supplementary aids and services, accommodations, and modifications the IEP team has determined the student needs. The provision of these services is not the direct responsibility of 4-H YDP.

14.0 A statement that the applicant understands that it has certain responsibilities, pursuant to Section 504 of the Rehabilitation Act, if it receives federal funds, or the Americans with Disabilities Act, as amended, to provide students with disabilities with equal access and equal opportunities to participate in the learn everywhere program, including by providing the student with reasonable accommodations [Ed 1403.01(e)(2)(d)].

NH 4-H Youth Development program understands that it has certain responsibilities, pursuant to Section 504 of the Rehabilitation Act, if it receives federal funds, or the Americans with Disabilities Act, as amended, to provide students with disabilities with equal access and equal opportunities to participate in the Learn Everywhere program, including by providing the student with reasonable accommodations as required in Ed 1403.01(b)(2)(d).

15.0 A description of facilities to be used for educational instruction and a description of how the facilities will meet the priorities of the program [Ed 1403.01(e)(3)(a)].

4-H Youth Development Program relies on the facilities that youth and families choose to use as their meeting places for the majority of our program learning. This could be school classrooms, workshops, family homes, 4-H buildings, farms, or other spaces that choose to host 4-H Youth.

When a mentor indicates interest in participating in the Learn Everywhere program, they will have to check a box on a form to certify that their facility meets these requirements.

Affirmation of Compliance

Do you affirm that your facilities shall comply with all applicable federal and state health and safety laws, rules, and regulations? These include but are not limited to fire safety codes and barrier-free access under Abfd 300, code for barrier-free design, and the Americans with Disabilities Act of 1990(ADA), as amended by the ADA Amendments Act of 2008?

Yes No

Please note that participation in the Learn Everywhere Program shall not make facility requirements not otherwise required by state or federal law.

16.0 A statement affirming that the facilities shall comply with all applicable federal and state health and safety laws, rules, and regulations, including but not limited to the following

- 1. Fire safety; and**
- 2. Barrier-free access under Abfd 300, code for barrier-free design, and the Americans with Disabilities Act of 1990 (ADA), as amended by the ADA Amendments Act of 2008**

[Ed 1403.01(e)(3)(b)].

4-H Youth Development Program affirms all facilities will comply with all applicable federal and state health and safety laws, rules, and regulations as required in Ed 1403.01(b)(3)(b).

17.0 Disclosure of insurance, if any, which would cover the participants in the Learn Everywhere program [Ed 1403.01(e)(4)].

All employees of the University of New Hampshire are covered for liabilities while carrying out the responsibilities of their positions. Enrolled volunteers are covered by the University System of NH liability policy as well provided they are acting within the scope of their service descriptions.

4-H Staff is ultimately responsible for the 4-H program in their respective counties or area. This responsibility may be shared or delegated, but the 4-H Staff is still accountable. Responsibility can be delegated but never released.

4-H youth participants may be covered by supplemental insurance through American Income Life (AIL) Insurance. 4-H Staff can file for coverage through AIL to cover specific experiences.

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If a certificate of Liability Insurance is needed with a business, organization etc. named on the certificate, complete the application for additional Insured at least 2 weeks before the event, ideally a month.