

Program Information & Skill Alignment Chart for:
Animal Production Science & Technology – CIP Code 01.0901
Willow Street Campus
Form to be submitted to IU 13 with PIF

Program Description	<ul style="list-style-type: none"> • Explore the care, management, evaluation, treatment and marketing of agricultural production animals such as beef, dairy, swine, poultry, sheep, goats, and horses • Experience the passion of working with animals in a variety of farm settings • Interact with experts in the field through job shadowing, clinical experience, co-op opportunities, and FFA membership 	
Program Information (costs, certifications, uniform)	<p><u>Textbooks-</u> (Provided to Students) An Illustrated Guide to Animal Science Terminology Modern Livestock and Poultry Production</p> <p><u>Uniforms-</u> \$250-\$300 (approximate)</p> <ul style="list-style-type: none"> • Recommended at minimum 3-5 shirts, 3-5 pairs of pants, 2 sweatshirts, 1 set of coveralls, other items as needed • 3-5 polos with logo (required) • 3-5 khaki pants (required) • 1 pair of boots for school use only (required) • 1 set of navy coveralls (required – some available to borrow) • 2-3 sweatshirts with logo (optional but recommended) <p><u>Program Opportunities/Certifications –</u></p> <ul style="list-style-type: none"> • Participate in off-campus field trips • Industry networking via guest speakers and trade shows • Hands-on experience with class rabbits and other visiting livestock • FFA opportunities (officers, workshops, contests, conferences, etc.) • Certifications: <ul style="list-style-type: none"> • Beef Quality Assurance • Masters of Beef Advocacy • Pork Quality Assurance • Transport Quality Assurance • OSHA-Agriculture • FEMA: Animals in Disasters – Awareness & Preparedness • FEMA: Animals in Disasters – Community Planning • FEMA: Livestock in Disasters • Dairy Leaders of Tomorrow • Artificial Insemination for Cattle (optional - approximately \$300) • Certified Poultry Technician (optional - approximately \$10) 	
Program Outline & Pathways	<p><u>State Program of Study Task Outline</u></p> <ul style="list-style-type: none"> • Not a state program of study <p>Local Task Outline includes:</p> <ul style="list-style-type: none"> • orientation & safety • orientation to careers & practices in production animal science • animal safety & handling • animal husbandry skills • health management 	<p><u>Pathways</u> <u>(Some may require additional schooling/training):</u></p> <ul style="list-style-type: none"> • Animal Caretaker • Agricultural Production • Farmer • Herd Manager • Artificial Insemination Technician • Dairy/Milk Processer • Feed Mill Operator

	<ul style="list-style-type: none"> • principles of animal nutrition • current trends in estrus detection • dairy • equine • swine • beef • poultry • sheep & goats • agriculture business management 	<ul style="list-style-type: none"> • Lab/Research Technician • Poultry Service/Vaccination Technician • USDA Inspector • Veterinary Medicine
Other Information <i>Include Articulation Agreements</i>	Student to teacher ratio is 25:1, depending on class size All students are members of LCCTC FFA Articulation Agreements: <ul style="list-style-type: none"> • Delaware Valley University • Harcum College 	

Student Name: _____ **District:** _____

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Educational and Physical Attributes	Program Expectations	Present Education Level and Current Supports
Program Safety / Physical Considerations	<ul style="list-style-type: none"> • Emotional & mental stability (ability to remain calm when encountering stressful situations) • Empathy to understand the pains and suffering of others • Able to work under pressure/in adverse conditions/within time constraints • Lift heavy objects/animals • Good personal hygiene (may be asked to remove all jewelry for specific labs or tours) • Ability to represent the program well on field trip and job shadowing days • No allergies to animals 	
Action/Need:		
Program Environment <i>Indoor/outdoor</i> <i>Dust/dirt/fume/noise etc.</i> <i>Layout of room – theory/lab</i>	<ul style="list-style-type: none"> • Indoors majority of the day at school – outdoors when working with large animals • Field trips may be indoors or outdoors • Animal fur and dander • Animal waste smells 	

	<ul style="list-style-type: none"> Dust 	
Action/Need:		
Typical level of support	<p>At CTC, we have itinerant IU13 support teachers and paraeducators. In the itinerant model, the support teachers have multiple programs and provide check-ins during the day. The itinerant model does not include co-taught classes where teachers are in classes for extended periods of time. IU13 paraeducators also support several teachers, spreading out their day between multiple programs.</p> <p>The learning center is available at scheduled times for testing accommodations, study/instructional groups, and work completion support. Since time there takes away from lab time, students are encouraged to use it strategically.</p>	
Action/Need:		
Reading / ELA levels Keystone Literature Assessment Anchors Keystone test results should be considered when applying for this program.	<ul style="list-style-type: none"> Technical Reading Skills (10th-12th grade reading level) Identify and/or explain stated or implied main ideas and relevant supporting details from a text. Make inferences and/or draw conclusions based on analysis of a text. Explain, interpret, compare, describe, analyze, and/or evaluate connections between texts. Identify, analyze, and evaluate the structure and format of complex informational texts Identify, explain, compare, interpret, describe, and/or analyze the sequence of steps in a list of directions. 	

	<ul style="list-style-type: none"> • Explain, interpret, and/or analyze the effect of text organization, including headings, graphics, and charts. • Identify, explain, and/or interpret bias and propaganda techniques in nonfictional text. 	
Action/Need:		
Writing Levels Keystone English Composition Assessment Anchors	<ul style="list-style-type: none"> • Technical Writing Skills • Demonstrate an understanding of the purpose with relevant information, content, and details. • Use appropriate organizational strategies for informational and explanatory writing (e.g., compare/contrast, cause/effect, problem/solution, process analysis). • Write with control of grammar, mechanics, spelling, usage, and sentence formation. • Spell all words correctly. • Use capital letters correctly. • Punctuate correctly (e.g., correctly use commas, semicolons, quotation marks, apostrophes). • Demonstrate correct grammar and usage (e.g., verb and pronoun form and agreement, modifiers and transitions, word order and syntax). Demonstrate correct sentence formation.	
Action/Need:		
Math Levels Keystone test results should be considered when applying for this program. Examples: Mike is going to take eighteen calves to the livestock sale yard. If the average weight is six hundred seventy-two pounds each, and the average price the calves are selling at the auction is 92 cents per pound, about how much money	<ul style="list-style-type: none"> • Basic • Find the Greatest Common Factor (GCF) and/or the Least Common Multiple (LCM) for sets of monomials. • Use estimation to solve problems. • Simplify/reduce a rational algebraic expression. • Write, solve, and/or apply a linear equation (including problem situations). • Use and/or identify an algebraic property to justify any step in an equation-solving process. Note: Linear equations only. • Syringe Reading 	

<p>will Mike bring home from the calves he sells?</p> <p>You are making feed for a flock of 100 Ewes. You need silage, barley and soybean meal at a ratio of 5:2:1. In one day you need 81.2581.25 kilograms of silage. How many kilograms of barley and soybean meal do you need?</p>	<ul style="list-style-type: none"> • Business Math (Balance Sheet, Income Statement) 	
Action/Need:		
<p>Science Levels</p> <p><i>For Medical programs and PSA</i></p> <p>Keystone Biology Assessment Anchors</p> <p>Keystone test results should be considered when applying for this program.</p> <p>CASE</p> <p>Principles of Agricultural Science - Animal</p>	<ul style="list-style-type: none"> • Basic • Describe and interpret relationships between structure and function at various levels of biological organization • Explain how genetic engineering has impacted the fields of medicine, forensics, and agriculture (e.g., selective breeding, gene splicing, cloning, genetically modified organisms, gene therapy). 	
Action/Need:		
<p>Theory time</p>	<ul style="list-style-type: none"> • 60% 	
Action/Need:		
<p>Homework</p> <p><i>Amount per night</i></p>	<ul style="list-style-type: none"> • Up to 1-2 hours per night but time is provided in class • Facility Design Project (September – March) 	
Action/Need:		

Lab Time <i>Guided vs Independent Work</i>	<ul style="list-style-type: none"> • 40% (20% guided, 20% independent) 	
Action/Need:		
Tests <i>NOCTI testing – None</i> <i>Frequency of tests/quizzes</i>	<ul style="list-style-type: none"> • Certification tests • Weekly vocabulary quizzes • Several unit-tests • No NOCTI • Frequent skills evaluations 	
Action/Need:		
Behavioral Expectations <i>Executive Function</i> <i>Organizational skills</i>	<ul style="list-style-type: none"> • All students are expected to act in a professional manner at all times • Strong organizational skills • Strong time management • Strong work ethic • Responsibility • Positive attitude • Must work well with others • Excellent attendance required for success • Dedication to comprehension and studying of material • Positive representation of program on off-campus field trips • Attentiveness to guest speakers 	
Action/Need:		
Other <i>Technology skills specific to the program</i> <i>Additional skills that are valuable for program success.</i>	<ul style="list-style-type: none"> • Attention to detail • Organization of material and time prioritization • Basic computer & keyboarding skills 	

	<ul style="list-style-type: none">• Use of school issued device• Navigation of Canvas learning management platform• Web navigation• Email management• Typed essays, farm business management plan• Citations in APA format	
Action/Need:		

District Representative Signature_____ Date_____