

# High School to College and Career Pathway: Secondary

## Career and Technical Education: Preparing Students for College and Career!



### Area of Study: Agricultural Education

### Pathway: Animal Systems

**Get the Facts**  
Agriculture is a vital industry to Utah's economy. There are 16,700 farms in the state, totaling approximately 11 million acres, where Utah agriculturists produce crops and livestock worth over \$1.5 billion annually.  
In Utah, a veterinarian must be licensed.

**Workforce Trends**  
Twenty-one million people (or 18.5 percent of the American workforce) are employed in the agricultural industry. Farmers and ranchers provide food and habitat for 75 percent of the nation's wildlife. One-fourth of the world's beef and one-fifth of the world's grain, milk, and eggs are produced in the United States.

**CAREER AND TECHNICAL EDUCATION Recommended Pathway Courses**  
(Students may select individual courses for exploration, or a complete Pathway for an in-depth focus.)

**CLASS AVAILABILITY MAY VARY AT YOUR HIGH SCHOOL**

Course #	Foundation Courses: (required)	Credit
<i>Choose two or more credits from the following courses:</i>		
02.0211	Animal Science I	1.00
02.0241	Animal Science II	1.00
02.0221	Equine Science	1.00
02.0271	Small and Companion Animal Science	1.00
02.0231	Veterinary Assistant	1.00
<b>Elective Courses:</b>		
01.0111	Agricultural Business Management	1.00
01.0802	Agricultural Communication	1.00
01.0803	Agricultural Leadership	1.00
01.0311	Agricultural Science I	1.00
01.0361	Aquaculture, Advanced	1.00
01.0351	Aquaculture, Introductory	1.00
02.0112	Biology-Agricultural Science	1.00
02.0222	Equine Science A	.50
02.0223	Equine Science B	.50
01.0121	Farm and Ranch Management	1.00
02.0235	Veterinary Technician	1.00
01.0100	Summer Agriculture Program	.25
	Supervised Agriculture Experience Program (capstone experience)	
32.0199	Workplace Skills	.50

**Production/Processing Animal Science is:**  
> High skill  
> High wage

**Sample Career Occupations**  
> Agricultural Education Teacher  
> Animal Geneticist  
> Animal Nutritionist  
> Animal Scientist  
> Animal Technician  
> Aquaculturist  
> Feed Sales Representative  
> Herdsman  
> Livestock Inspector  
> Veterinarian  
> Veterinary Technician

2.00 credits (Foundation Courses)

1.00 credit (Elective Courses)

**3.00 credits for completion**

Foundation courses taken beyond the required credits can be used as elective credit.

Middle School		State Requirements		High School Suggested Education Plan				College and Career
7th Grade	8th Grade	Middle School	High School	9th Grade Suggested	10th Grade Suggested	11th Grade Suggested	12th Grade Suggested	Beyond High School
Language Arts 7 1.00	Language Arts 8 1.00	2.00	Language Arts 4.00	Language Arts 9 1.00	Language Arts 10 1.00	Language Arts 11 1.00	Language Arts 12 1.00	<p>There are a number of options for education and training beyond high school, depending on your career goals.</p> <ul style="list-style-type: none"> <li>&gt; Certificate</li> <li>&gt; Associate degree</li> <li>&gt; Bachelor's degree</li> <li>&gt; Professional degree</li> <li>&gt; On-the-job training</li> <li>&gt; Apprenticeship</li> <li>&gt; Military training</li> </ul> <p>For more information on salary projections, labor market demand, and training options, visit <a href="http://UtahFutures.org">UtahFutures.org</a>.</p>
Math * 1.00	Math * 1.00	2.00	Math 3.00	Math * 1.00	Math * 1.00	Math * 1.00		
Science .50	Science 1.00	1.50	Science 3.00	Earth Systems 1.00	Biology-Agricultural Science or Biological Science 1.00	Agricultural Science I 1.00		
Utah Studies .50	U.S. History I 1.00	1.50	Social Studies 3.00	Geography for Life .50	World Civilizations .50	U.S. History II 1.00	U.S. Government and Citizenship .50	
P.E. 1.00	Health .50	1.50	P.E./Health 2.00	Participation Skills and Techniques .50	Fitness for Life .50 / Health Education .50 Lifetime Activities or Sport .50			
The Arts .50	The Arts .50	1.00	Fine Arts 1.50	Fine Arts Courses 1.50				
Keyboarding .50			Computer Tech. .50	Computer Technology .50				
College & Career Awareness 1.00		1.00	CTE 1.00	Refer to Career and Technical Education box above.				

> \* Talk to your school counselor about math requirements in the core curriculum. Core curriculum and elective requirements may vary district to district.  
> Many CTE courses may qualify for concurrent enrollment credit, which in some cases may earn up to 1.0 credit toward Pathway completion. Talk to your school counselor about availability.

> Concurrent enrollment course offerings vary by school and district.  
> Many Utah postsecondary programs accept high school courses toward a two- or four-year degree through concurrent enrollment. Check regional postsecondary Pathways for details.