

MAJOR IN AGRICULTURAL EDUCATION, TEACHER DEVELOPMENT CONCENTRATION

Teacher development in school-based agricultural education is delivered in a three-part model: classroom, experiential learning, and leadership development. Teacher development in school-based agriculture education is education in agriculture. In Colorado, agricultural education is delivered through approximately 120 secondary programs located throughout the state. Over 6,000 young people are enrolled in agricultural education programs in Colorado. Students in the Teacher Development concentration take classes in agriculture and in Educator Preparation (<http://www.cep.chhs.colostate.edu/>). A Bachelor of Science degree in Agricultural Education with a concentration in Teacher Development leads to teacher licensure by the state of Colorado. The curriculum requires students to demonstrate a competent knowledge of educational

theory and a broad-based understanding in agricultural content. Students combine practical experience and technical course work including animal science, plant science, agricultural mechanics, natural resources, food products and processing, and agriculture business. Students must have a 2.75 GPA, pass the Praxis II assessment for Agriculture and Renewable Natural Resources licensure, and complete a student teaching semester internship.

Potential Occupations

Graduates in the Teacher Development concentration are in demand to fill a shortage in agricultural education teachers. Two-thirds of program graduates take teaching and administrative positions in public schools. Other graduates fill positions in agribusiness, feed, seed, fertilizer, machinery and finance companies, and human resource positions in agribusiness companies. Additionally, graduates often pursue advanced degrees in teaching agriculture and work at community colleges, in extension, or as curriculum specialists in organizations.

Requirements Effective Fall 2023

Freshman

		AUCC	Credits
AGED 210	History of Agriculture in the United States	3D	3
AGED 220	Understanding Agricultural Education		1
AGED 240	Technical Tool Applications in Ag Education		2
ANEQ 250	Live Animal and Carcass Evaluation		3
AREC 192	Orientation to Agricultural and Resource Econ		1
AREC 202	Agricultural and Resource Economics (GT-SS1)	3C	3
CHEM 107	Fundamentals of Chemistry (GT-SC2)	3A	4
CO 150	College Composition (GT-CO2)	1A	3
Select one course from the following:			4
ANEQ 101	Food Animal Science		
ANEQ 102	Introduction to Equine Science		
Select four credits from the following:			4
BZ 110 & BZ 111	Principles of Animal Biology (GT-SC2)	3A	
BZ 120	Principles of Plant Biology (GT-SC1)	3A	
LIFE 102	Attributes of Living Systems (GT-SC1)	3A	
Select a minimum of three credits from the following:			3-4
MATH 117	College Algebra in Context I (GT-MA1)	1B	
MATH 118	College Algebra in Context II (GT-MA1)	1B	
MATH 124	Logarithmic and Exponential Functions (GT-MA1)	1B	
MATH 141	Calculus in Management Sciences (GT-MA1)	1B	
MATH 155	Calculus for Biological Scientists I (GT-MA1)	1B	
MATH 160	Calculus for Physical Scientists I (GT-MA1)	1B	
Total Credits			31-32

Sophomore

AGED 244	Power, Structure, and Tech. Systems in Ag Ed		3
EDUC 275	Schooling in the United States (GT-SS3)	3C	3
FW 104	Wildlife Ecology and Conservation (GT-SC2)	3A	3
SOCR 100	General Crops		4
SOCR 240	Introductory Soil Science		4

Agricultural Science Elective ¹			5-7
Arts and Humanities (http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#arts-humanities)	3B		6
Diversity, Equity, and Inclusion (http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#diversity-equity-inclusion)	1C		3
Total Credits			31-33
Junior			
AGED 420	Developing School-Based Ag Education Programs		3
AREC 305	Agricultural and Resource Enterprise Analysis		3
EDUC 331	Educational Technology and Assessment		2
EDUC 340	Literacy and the Learner		3
EDUC 350	Instruction I-Individualization/Management		3
EDUC 386	Practicum-Instruction I		1
Select one course from the following:			3
AREC 310	Agricultural Marketing		
AREC 311	Agricultural and Resource Product Marketing		
AREC 342	Water Law, Policy, and Institutions		
AREC 375	Agricultural Law		
AREC 408	Agricultural Finance		
AREC 478	Agricultural Policy		
Select one course from the following:			3
RS 300	Rangeland Conservation and Stewardship		
SOCR 320	Sustainable Forage Management for Livestock		
Food Products and Processing (Select two courses from the following)			5-6
AN EQ 360	Principles of Meat Science		
AN EQ 450	Processed Meats		
FTEC 110 or FSHN 125	Food-From Farm to Table Food and Nutrition in Health		
Advanced Writing (http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#advanced-writing)		2	3
Total Credits			29-30
Senior			
AGED 440	Managing Experiences in Ag Ed Laboratories		1
AREC 492	Senior Seminar in Ag and Resource Economics		1
EDCT 425	Methods/Materials in Agricultural Education		4
EDCT 485	Student Teaching	4A,4B,4C	11
EDCT 492	Seminar-Professional Relations	4C	1
EDUC 450	Instruction II-Standards and Assessment		4
EDUC 486E	Practicum: Instruction II		1
HORT 100	Horticultural Science	3A	4
Total Credits			27
Program Total Credits:			120

¹ Select course(s) in consultation with advisor from subject codes including: AB, AGED, AGRI, ANEQ, AREC, BSPM, FSHN, FTEC, HORT, LAND, NR, RS, WR, GES.

Major Completion Map

Freshman

Semester 1		Critical	Recommended	AUCC	Credits
AGED 210	History of Agriculture in the United States			3D	3
AGED 220	Understanding Agricultural Education		X		1
AREC 192	Orientation to Agricultural and Resource Econ				1
CO 150	College Composition (GT-CO2)			1A	3
Select one course from the following:					4
ANEQ 101	Food Animal Science				
ANEQ 102	Introduction to Equine Science				
Select 4 credits from the following:					4
BZ 110 & BZ 111	Principles of Animal Biology (GT-SC2)			3A	
BZ 120	Principles of Plant Biology (GT-SC1)			3A	
LIFE 102	Attributes of Living Systems (GT-SC1)			3A	
Total Credits					16

Semester 2		Critical	Recommended	AUCC	Credits
AREC 202	Agricultural and Resource Economics (GT-SS1)		X	3C	3
AGED 240	Technical Tool Applications in Ag Education	X			2
ANEQ 250	Live Animal and Carcass Evaluation				3
CHEM 107	Fundamentals of Chemistry (GT-SC2)			3A	4
Select a minimum of three credits from the following:					3-4
MATH 117	College Algebra in Context I (GT-MA1)	X		1B	
MATH 118	College Algebra in Context II (GT-MA1)	X		1B	
MATH 124	Logarithmic and Exponential Functions (GT-MA1)			1B	
MATH 141	Calculus in Management Sciences (GT-MA1)			1B	
MATH 155	Calculus for Biological Scientists I (GT-MA1)			1B	
MATH 160	Calculus for Physical Scientists I (GT-MA1)			1B	
Total Credits					15-16

Sophomore

Semester 3		Critical	Recommended	AUCC	Credits
AGED 244	Power, Structure, and Tech. Systems in Ag Ed	X			3
SOCR 100	General Crops		X		4
Agricultural Science Elective					3
Arts and Humanities (http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#arts-humanities)					3
Diversity, Equity, and Inclusion (http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#diversity-equity-inclusion)					3
CHEM 107 must be completed by the end of Semester 3.					X
Total Credits					16

Semester 4		Critical	Recommended	AUCC	Credits
EDUC 275	Schooling in the United States (GT-SS3)			3C	3
FW 104	Wildlife Ecology and Conservation (GT-SC2)			3A	3
SOCR 240	Introductory Soil Science				4
Agricultural Science Elective					2-4
Arts and Humanities (http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#arts-humanities)					3
Total Credits					15-17

Junior

Semester 5		Critical	Recommended	AUCC	Credits
EDUC 340	Literacy and the Learner	X			3
Select one course from the following:					3

AREC 310	Agricultural Marketing			
AREC 311	Agricultural and Resource Product Marketing			
AREC 342	Water Law, Policy, and Institutions			
AREC 375	Agricultural Law			
AREC 408	Agricultural Finance			
AREC 478	Agricultural Policy			
Select one course from the following:				3
RS 300	Rangeland Conservation and Stewardship			
SOCR 320	Sustainable Forage Management for Livestock			
Food Products and Processing (Select two courses from the following)				5-6
AGED 698	Agricultural Education Research			
AN EQ 360	Principles of Meat Science			
FTEC 110 or	Food-From Farm to Table			
FSHN 125	Food and Nutrition in Health			
AGED 220 must be completed by the end of Semester 5.				X
Acceptance into teacher licensure must be completed by the end of Semester 5.				X

Total Credits					14-15
Semester 6		Critical	Recommended	AUCC	Credits
AGED 420	Developing School-Based Ag Education Programs				3
AREC 305	Agricultural and Resource Enterprise Analysis				3
EDUC 350	Instruction I-Individualization/Management	X			3
EDUC 331	Educational Technology and Assessment	X			2
EDUC 386	Practicum-Instruction I	X			1
Advanced Writing (http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#advanced-writing)				2	3
Total Credits					15
Senior					
Semester 7		Critical	Recommended	AUCC	Credits
AGED 440	Managing Experiences in Ag Ed Laboratories				1
EDCT 425	Methods/Materials in Agricultural Education				4
EDUC 450	Instruction II-Standards and Assessment	X			4
EDUC 486E	Practicum: Instruction II	X			1
HORT 100	Horticultural Science			3A	4
Total Credits					14
Semester 8		Critical	Recommended	AUCC	Credits
AREC 492	Senior Seminar in Ag and Resource Economics	X			1
EDCT 485	Student Teaching	X		4A,4B,4C	11
EDCT 492	Seminar-Professional Relations	X		4C	1
The benchmark courses for the 8th semester are the remaining courses in the entire program of study.					
Total Credits					13
Program Total Credits:					120