



AGRICULTURE EDUCATION, GRADES 9-12

EDUCATOR PREPARATION PROGRAM NAME NORTHWEST MISSOURI STATE UNIVERSITY	EDUCATOR PREPARATION PROGRAM CODE 118118
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INSTRUCTIONS

Please complete Educator Preparation Program (EPP) Name & EPP Code above. The EPP Code may be located at <https://dese.mo.gov/sites/default/files/EPP-Code-Name.pdf>

Certification Requirements:

- **Course Number** – List the course number(s) for the course(s) or groups of competencies that align with the specific section of the requirements. It is possible to have more than one course or group listed.
- **Course Title** – List the course title(s) for the course(s) or groups of competencies that align with the specific section of the requirements. It is possible to have more than one course or group listed.
- **Semester Hours** – List the number of semester hours for each specific section. It is possible to use decimals (to the nearest tenth) to indicate partial use of a course to meet a requirement. The total number of semester hours must meet or exceed the minimum required number of semester hours.

Email the completed cover sheet, curriculum matrix, and advising/program information to DESE.MoSPETransition@dese.mo.gov on or before the date established in the Transition Plan.

QUESTIONS: Contact Educator Preparation, 573/751-1668 or DESE.MoSPETransition@dese.mo.gov

A. Professional Requirements (Minimum of 26 semester hours)

1. Content Planning and Delivery

	Course Number (Competency Driven Courses to fulfill this requirement include :)	Course Title	Semester Hours
a. Curriculum and Instructional Planning	03-580 or 03-580 03-524 or 03-524 03-420 or 61-145	Methods in Teaching Agriculture or Methods of Instruction and Assessment in Agricultural Education (name change) Teaching Agricultural Science Laboratories or Methods of Instruction and Assessment in Agricultural Education Laboratories (name change) Program Planning in Agricultural Education Information and Educational Technology/Digital Literacy	.5 1
b. Instructional Strategies and Techniques in Content Area Specialty	03-580 or 03-580 03-524 or 03-524	Methods in Teaching Agriculture or Methods of Instruction and Assessment in Agricultural Education (name change) Teaching Agricultural Science Laboratories or Methods of Instruction and Assessment in Agricultural Education Laboratories (name change)	.5
c. Assessment, Student Data, and Data-Based Decision-Making	03-580 or 03-580 03-524 or 03-524 03-420 or 61-145	Methods in Teaching Agriculture or Methods of Instruction and Assessment in Agricultural Education (name change) Teaching Agricultural Science Laboratories or Methods of Instruction and Assessment in Agricultural Education Laboratories (name change) Program Planning in Agricultural Education Information and Educational Technology/Digital Literacy	.5 1
d. Strategies for Content Literacy	03-580 or 03-580 62-353	Methods in Teaching Agriculture or Methods of Instruction and Assessment in Agricultural Education (name change) Reading in the Content Areas	.5

e. Critical Thinking and Problem Solving	61-145 or 44-130 or 62-130 29-102	Information and Educational Technology/Digital Literacy or Computers & Information Technology/Digital Literacy or Educational Computing & Technology/Digital Literacy Fundamentals of Oral Communication	1 3
f. English Language Learning	61-260 61-461 61-569 61-521 61-472	Practicum I School and Society Multiculturalism Classroom Management Seminar Directed Student Teaching	1 .5 1
2. Individual Student Needs			
	Course Number (Competency Driven Courses to fulfill this requirement include :)	Course Title	Semester Hours
a. Psychological Development of the Child and Adolescent	08-322	Adolescent Psychology	2
b. Psychology/Education of the Exceptional Child	62-371	Introduction to Special Education	1
c. Differentiated Learning	62-371 61-569	Introduction to Special Education Multiculturalism	1 1
d. Classroom Management	61-520	Techniques of Classroom Management and Discipline	1
e. Cultural Diversity	61-569	Multiculturalism	1
f. Educational Psychology	08-299/08-303	Education Psychology	3
3. Schools and the Teaching Profession			
	Course Number (Competency Driven Courses to fulfill this requirement include :)	Course Title	Semester Hours
a. Consultation and Collaboration	61-520	Techniques of Classroom Management and Discipline	.5
b. Legal/Ethical Aspects of Teaching	61-521	Classroom Management Seminar	.5

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4. Secondary Literacy (Minimum of six semester hours)			
	Course Number (Competency Driven Courses to fulfill this requirement include :)	Course Title	Semester Hours
a. Reading and Writing in the Content Area	62-353	Teaching Reading in the Content Area	2
b. Instructional Interventions for Students with Reading Deficits	61-461 61-462 62-371	School and Society School and Society Seminar Introduction to Special Education	2 1 1
Professional Requirements - Total Semester Hours			28
B. Field and Clinical Experiences (Minimum of ten semester hours)			
	Course Number (Competency Driven Courses to fulfill this requirement include :)	Course Title	Semester Hours
1. Early Field Experiences (Minimum of one semester hour with a minimum of 30 clock hours)	61-260	Practicum I	1
2. Mid-Level Field Experiences (Minimum of one semester hour with a minimum of 45 clock hours)	61-360	Practicum II	1
3. Culminating Clinical Experiences (Minimum of eight semester hours with a minimum of 12 weeks in one placement)	61-472	Directed Teaching in K-12 School	9
Field and Clinical Experiences - Total Semester Hours			11
Agriculture Content Knowledge Area (Minimum of 53 semester hours)			
A. Agriculture Content Knowledge Area (Minimum of 30 semester hours)			
	Course Number	Course Title	Semester Hours
1. Animal Science (Minimum of three semester hours)	03-150	Animal Science	4
2. Agronomy (Minimum of three semester hours)	03-130	Plant Science	4
3. Agriculture Business (Minimum of three semester hours)	03-304	Farm Management and Record Analysis	3
4. Agriculture Economics (Minimum of three semester hours)	03-102	Introductory Agricultural Economics	3
5. Agriculture Mechanics (Minimum of three semester hours)	03-112	Agricultural Mechanics	4
6. Horticulture (Minimum of three semester hours)	03-380 03-382 03-385 03-387 03-388 03-483 03-485 03-489 03-582 03-583 03-585 03-589	Plant Propagation Woody Landscape Plants Landscape Design Greenhouse Crop Production Greenhouse Management and Materials Fruit and Vegetable Crop Production Landscape Construction Herbaceous Perennials Independent Study in Horticulture Plant Diseases Turfgrass Management Principles of Postharvest Agriculture Problems in Horticulture	3

<p>7. Electives from above (Minimum of zero-12 semester hours)</p>	<p>03199 03396 03302 03305 03307 03308 03309 03404 03407 03408 03409 03502 03503 03504 03505 03508 03509 03598 03312 03419 03510 03518 03519 03429 03529 03296 03393 03498 03590 03232 03238 03292 03330 03332 03336 03432 03434 03437 03438 03440 03442 03443 03444 03445 03448 03449 03530 03534 03536 03540 03543 03549 03252 03352 03358 03360 03362 03365 03366 03450 03452 03454 03455 03460 03469 03470 03566 03569 03380 03381 03382 03383 03385</p>	<p>World Foods Agricultural Advocacy Agricultural Marketing Rural Real Estate Appraisal Farm Business Records Agricultural Data Analysis Applied Futures Marketing Livestock Marketing Agricultural Finance Professional Farm Management Independent Study in Agricultural Economics Agricultural Prices Agricultural Law Futures Trading Agricultural Resource Economics Agriculture Policy Problems in Agricultural Economics Advanced Agricultural Applications of Computers and GPS Agricultural Welding Independent Study in Agricultural Mechanization Techniques in Agricultural Surveying Agricultural Drainage and Irrigation Problems in Agricultural Mechanization Independent Study in Agricultural Education Problems in Agricultural Education Seminar U.S. Agriculture Travel Experience Agriculture Occupations Internship International Agriculture Travel Experience Crop Production Techniques of Crop Scouting Introduction to Agricultural Pesticides Forage Crop Science Soil Microbiology Crop Physiology Soil and Water Conservation Weed Science: Ecology and Control Soil Judging Advanced Crop Production Introduction to Precision Agriculture Practical Field Crops Evaluation Precision Ag Production Precision Ag Service Applied Research in Precision Agriculture Principles of Spray App Technology Independent Study in Agronomy Soil Formation and Classification Plant Breeding Soil Fertility Grain Crops Soil Chemistry: Environmental Quality and Plant Nutrition Problems in Agronomy Livestock Evaluation Meat Science Livestock Health and Disease Management Principles of Animal Nutrition Anatomy and Physiology of Domestic Animals Artificial Insemination Principles of Animal Breeding Small Ruminant Science Beef Science Swine Science Advanced Livestock Production and Management Advanced Animal Nutrition Independent Study in Animal Science Dairy Science Genetics of Livestock Improvement Problems in Animal Science Plant Propagation Applied Entomology Woody Landscape Plants Landscape Design Greenhouse Crop Production</p>	<p>9</p>
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	03387 03388 03483 03485 03489 03582 03583 03585 03589 03920 03990	Greenhouse Management and Materials Fruit and Vegetable Crop Production Landscape Construction Herbaceous Perennials Independent Study in Horticulture Plant Diseases Turfgrass Management Principles of Postharvest Agriculture Problems in Horticulture Lower Division Elective in Agriculture– Transfer Upper Division Elective in Agriculture - Transfer	
Agriculture Content Knowledge Area - Total Semester Hours			30
B. Electives from the following suggested areas: (15 semester hours)			
	Course Number	Course Title	Semester Hours
1. Forestry			0
2. Natural Resources	03-234 03-432	Fundamentals of Soil Science Soil and Water Conservation	4 0-3
3. Agriculture Journalism	03-396	Agricultural Advocacy	0-3
4. Integrated Pest Management	03-238 03-292 03-381 03-434	Techniques of Crop Scouting Introduction to Agricultural Pesticides Applied Entomology Weed Science: Ecology and Control	0-11
	03199 03396 03302 03305 03307 03308 03309 03404 03407 03408 03409 03502 03503 03504 03505 03508 03509 03598 03312 03419 03510 03518 03519 03429 03529 03296 03393 03498 03590 03232 03330 03332 03336 03432 03437 03438 03440 03442 03443 03444 03445 03448 03449 03530 03534	World Foods Agricultural Advocacy Agricultural Marketing Rural Real Estate Appraisal Farm Business Records Agricultural Data Analysis Applied Futures Marketing Livestock Marketing Agricultural Finance Professional Farm Management Independent Study in Agricultural Economics Agricultural Prices Agricultural Law Futures Trading Agricultural Resource Economics Agriculture Policy Problems in Agricultural Economics Advanced Agricultural Applications of Computers and GPS Agricultural Welding Independent Study in Agricultural Mechanization Techniques in Agricultural Surveying Agricultural Drainage and Irrigation Problems in Agricultural Mechanization Independent Study in Agricultural Education Problems in Agricultural Education Seminar U.S. Agriculture Travel Experience Agriculture Occupations Internship International Agriculture Travel Experience Crop Production Forage Crop Science Soil Microbiology Crop Physiology Soil and Water Conservation Soil Judging Advanced Crop Production Introduction to Precision Agriculture Practical Field Crops Evaluation Precision Ag Production Precision Ag Service Applied Research in Precision Agriculture Principles of Spray App Technology Independent Study in Agronomy Soil Formation and Classification Plant Breeding	0-11

	03536	Soil Fertility	
	03540	Grain Crops	
	03543	Soil Chemistry: Environmental Quality and Plant Nutrition	
	03549	Problems in Agronomy	
	03252	Livestock Evaluation	
	03352	Meat Science	
	03358	Livestock Health and Disease Management	
	03360	Principles of Animal Nutrition	
	03362	Anatomy and Physiology of Domestic Animals	
	03365	Artificial Insemination	
	03366	Principles of Animal Breeding	
	03450	Small Ruminant Science	
	03452	Beef Science	
	03454	Swine Science	
	03455	Advanced Livestock Production and Management	
	03460	Advanced Animal Nutrition	
	03469	Independent Study in Animal Science	
	03470	Dairy Science	
	03566	Genetics of Livestock Improvement	
	03569	Problems in Animal Science	
	03380	Plant Propagation	
	03382	Woody Landscape Plants	
	03383	Landscape Design	
	03385	Greenhouse Crop Production	
	03387	Greenhouse Management and Materials	
	03388	Fruit and Vegetable Crop Production	
	03483	Landscape Construction	
	03485	Herbaceous Perennials	
	03489	Independent Study in Horticulture	
	03582	Plant Diseases	
	03583	Turfgrass Management	
	03585	Principles of Postharvest Agriculture	
	03589	Problems in Horticulture	
	03920	Lower Division Elective in Agriculture - Transfer	
	03990	Upper Division Elective in Agriculture - Transfer	

5.	03396 03302 03305 03307 03308 03309 03404 03407 03408 03409 03502 03503 03504 03505 03508 03509 03598 03419 03510 03518 03519 03429 03529 03296 03393 03498 03590 03232 03238 03292 03330 03332 03336 03432 03434 03437 03438 03440 03442 03443 03444 03445 03448 03449 03530 03534 03536 03540 03543 03549 03252 03352 03358 03360 03362 03365 03366 03450 03452 03454 03455 03460 03469 03470 03566 03569 03380 03381 03382 03383 03385 03387	Agricultural Advocacy Agricultural Marketing Rural Real Estate Appraisal Farm Business Records Agricultural Data Analysis Applied Futures Marketing Livestock Marketing Agricultural Finance Professional Farm Management Independent Study in Agricultural Economics Agricultural Prices Agricultural Law Futures Trading Agricultural Resource Economics Agriculture Policy Problems in Agricultural Economics Advanced Agricultural Applications of Computers and GPS Independent Study in Agricultural Mechanization Techniques in Agricultural Surveying Agricultural Drainage and Irrigation Problems in Agricultural Mechanization Independent Study in Agricultural Education Problems in Agricultural Education Seminar U.S. Agriculture Travel Experience Agriculture Occupations Internship International Agriculture Travel Experience Crop Production Techniques of Crop Scouting Introduction to Agricultural Pesticides Forage Crop Science Soil Microbiology Crop Physiology Soil and Water Conservation Weed Science: Ecology and Control Soil Judging Advanced Crop Production Introduction to Precision Agriculture Practical Field Crops Evaluation Precision Ag Production Precision Ag Service Applied Research in Precision Agriculture Principles of Spray App Technology Independent Study in Agronomy Soil Formation and Classification Plant Breeding Soil Fertility Grain Crops Soil Chemistry: Environmental Quality and Plant Nutrition Problems in Agronomy Livestock Evaluation Meat Science Livestock Health and Disease Management Principles of Animal Nutrition Anatomy and Physiology of Domestic Animals Artificial Insemination Principles of Animal Breeding Small Ruminant Science Beef Science Swine Science Advanced Livestock Production and Management Advanced Animal Nutrition Independent Study in Animal Science Dairy Science Genetics of Livestock Improvement Problems in Animal Science Plant Propagation Applied Entomology Woody Landscape Plants Landscape Design Greenhouse Crop Production Greenhouse Management and Materials Fruit and Vegetable Crop Production	3
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	03388 03483 03485 03489 03582 03583 03585 03589 03920 03990	Landscape Construction Herbaceous Perennials Independent Study in Horticulture Plant Diseases Turfgrass Management Principles of Postharvest Agriculture Problems in Horticulture Lower Division Elective in Agriculture– Transfer Upper Division Elective in Agriculture - Transfer	
Electives - Total Semester Hours			15
C. Professional Vocational Education (Minimum of eight semester hours)			
	Course Number	Course Title	Semester Hours
1. Methods of Teaching Vocational Agriculture	03-580 or 03-580	Methods in Teaching Agriculture or Methods of Instruction and Assessment in Agricultural Education (name change)	.5
	03-524 or 03-524	Teaching Agricultural Science Laboratories or Methods of Instruction and Assessment in Agricultural Education Laboratories (name change)	.5
2. Program Planning	03-420	Program Planning in Agricultural Education	3
3. Developing and Supervising Occupational Experience Programs	03-421	Conducting Supervised Agricultural Experience Programs	1
a. Ownership (Entrepreneurship)	03-421	Conducting Supervised Agricultural Experience Programs	.5
b. Placement	03-421	Conducting Supervised Agricultural Experience Programs	.5
4. Developing and Using Instructional Materials and Teaching Aids	03-580 03-580	Methods in Teaching Agriculture or Methods of Instruction and Assessment in Agricultural Education (name change)	.5
	03-524 or 03-524	Teaching Agricultural Science Laboratories or Methods of Instruction and Assessment in Agricultural Education Laboratories (name change)	.5
5. Supervising Student Organizations	03-320	Foundations of Agricultural Education	3
6. Teaching Agriculture Mechanics	03-524 or 03-524	Teaching Agricultural Science Laboratories or Methods of Instruction and Assessment in Agricultural Education Laboratories (name change)	1
7. Planning and Conducting Adult Programs for Young and Adult Farmers	03-422 or 03-422	Adult Ed in Agriculture or Community Programming in Agriculture (name change)	2
Professional Vocational Education - Total Semester Hours			12