New Mexico Agriculture, Food & Natural Resources Course Framework

Agriculture Explorations (0131)

Suggested Course Length: 180 Days

Recommended Grade Levels: 7th-8th Grade

AFNR Pathway: Introduction to Agriculture, Food, and Natural Resources (Multi-Pathway Exploration Course)

Instructional Design Philosophy

Agriculture Explorations serves as New Mexico's foundational middle school agricultural education course. The purpose is to introduce students to agricultural literacy, FFA, SAE, leadership, plant science, animal science, natural resources, agribusiness, and agricultural career opportunities.

The **SAE should be introduced as the backbone of the course**, helping students explore interests before transitioning into Agricultural Science (0132) and pathway-specific courses at the high school level. Students should complete an exploratory SAE and begin using age-appropriate recordkeeping methods.

Course-at-a-Glance

Quarter	Units	Days
Q1	Units 1-3	45
Q2	Units 4-6	45
Q3	Units 7-9	45
Q4	Units 10-12	45

Unit 1: What is Agriculture?

Length: 15 Days

Course Competency	AFNR Performance Indicator	Sample Measurement	Teacher Resources	SAE/FFA Connection
Nature of Agriculture/Horticulture	CRP.01 Career Planning & Industry Awareness	Agriculture Industry Report	MyCAERT, Ag in the Classroom	SAE Exploration
History of Agriculture	CRP.01 Industry Awareness	Agriculture Timeline Project	National Ag in the Classroom	Career Exploration
Importance of Agriculture to Society	CRP.01 Agricultural Literacy	Agriculture Advocacy Presentation	NMDA Resources	Agricultural Literacy SAE

Unit Assessment

- Agricultural Timeline Project
- Agriculture Literacy Presentation

Unit 2: Communication and Leadership Foundations

Length: 15 Days

Course Competency	AFNR Performance Indicator	Sample Measurement	Teacher Resources	SAE/FFA Connection
Introduction to Communication	CRP.04 Communicate Effectively	Communication Activity	FFA LifeKnowledge	Leadership SAE
Effective Communication Techniques	CRP.04 Professional Communication	Group Presentation	Communication Rubrics	Chapter Participation
Effective Speaking Techniques	CRP.04 Oral Communication Skills	Speech Activity	FFA LDE Resources	Public Speaking Development

Unit Assessment

- Introductory Speech
- Communication Portfolio

Unit 3: Natural Resources and Ecosystems

Length: 15 Days

Course Competency	AFNR Performance Indicator	Sample Measurement	Teacher Resources	SAE/FFA Connection
Natural Resources	NRS.01 Resource Management	Resource Inventory	NMSU Extension	Environmental SAE
Importance of Natural Resources	NRS.02 Sustainability Principles	Conservation Project	Conservation Organizations	Exploratory SAE
Ecosystems	ESS.01 Ecosystem Relationships	Ecosystem Model	Environmental Education Resources	Wildlife SAE

Unit Assessment

- Ecosystem Investigation
- Natural Resource Portfolio

Unit 4: Animal Science Exploration

Length: 15 Days

Course Competency	AFNR Performance Indicator	Sample Measurement	Teacher Resources	SAE/FFA Connection
Animal Industry Trends	AS.01 Animal Agriculture Systems	Industry Trend Report	Animal Science Curriculum	Animal SAE
Ways Animals Help People	AS.01 Animal Industry Applications	Community Impact Activity	Livestock Resources	Companion Animal SAE
Animal Science Careers	AS.04 Career Opportunities	Career Investigation	AgCareers	Career Exploration

Unit Assessment

- Animal Industry Career Project
- Animal Science Presentation

Unit 5: Plant Science Foundations

Length: 15 Days

Course Competency	AFNR Performance Indicator	Sample Measurement	Teacher Resources	SAE/FFA Connection
Importance of Plant Science	PS.01 Plant Systems	Plant Industry Report	Plant Science Resources	Plant SAE
Seed Germination	PS.03 Plant Reproduction	Germination Lab	Greenhouse Materials	Plant Production SAE
Plant Life Cycles	PS.02 Plant Growth & Development	Life Cycle Project	Plant Curriculum Resources	Research SAE

Unit Assessment

- Germination Investigation
- Plant Life Cycle Project

Unit 6: Plant Propagation and Soils

Length: 15 Days

Course Competency	AFNR Performance Indicator	Sample Measurement	Teacher Resources	SAE/FFA Connection
Plant Propagation	PS.03 Plant Reproduction	Propagation Lab	Greenhouse Curriculum	Plant SAE
Nature of Soil	PS.01 Plant Growth Factors	Soil Analysis Activity	Soil Science Resources	Crop Production SAE
Soil Importance	PS.01 Soil Productivity	Soil Portfolio	NMSU Extension	Exploratory SAE

Unit Assessment

- Soil Science Project
- Plant Propagation Lab

Unit 7: FFA Foundations

Length: 15 Days

Course Competency	AFNR Performance Indicator	Sample Measurement	Teacher Resources	SAE/FFA Connection
History and Organization of FFA	CRP.01 Career Awareness	FFA Knowledge Test	National FFA Resources	FFA Membership
Opportunities in FFA	CRP.03 Leadership Development	Opportunity Exploration Activity	FFA Website	Chapter Participation
Agricultural Leadership	CRP.03 Professional Leadership	Leadership Reflection	FFA Materials	Leadership SAE

Unit Assessment

- FFA Portfolio
- Leadership Reflection

Unit 8: Supervised Agricultural Experience (SAE)

Length: 15 Days

Course Competency	AFNR Performance Indicator	Sample Measurement	Teacher Resources	SAE/FFA Connection
Benefits of SAE	CRP.01 Career Planning	SAE Exploration Project	SAE for All Resources	Exploratory SAE
Beginning SAE Programs	CRP.01 Career Development	SAE Proposal	National FFA SAE Guides	Beginning SAE
Agricultural Career Interests	CRP.01 Career Awareness	Interest Inventory	AgExplorer	Career Exploration SAE

Unit Assessment

- SAE Proposal
- Career Interest Inventory

Unit 9: Environmental Resources

Length: 15 Days

Course Competency	AFNR Performance Indicator	Sample Measurement	Teacher Resources	SAE/FFA Connection
Water Cycle	ESS.01 Environmental Systems	Water Cycle Model	Environmental Education Resources	Natural Resources SAE
Forest Resources	NRS.02 Resource Conservation	Forestry Investigation	Forestry Resources	Environmental SAE
Wildlife Conservation	NRS.03 Wildlife Management	Wildlife Conservation Project	Conservation Education Materials	Wildlife SAE

Unit Assessment

- Conservation Project
- Water Cycle Investigation

Unit 10: Agribusiness Foundations

Length: 15 Days

Course Competency	AFNR Performance Indicator	Sample Measurement	Teacher Resources	SAE/FFA Connection
Free Enterprise System	ABS.01 Economic Principles	Free Enterprise Activity	MyCAERT Agribusiness	Entrepreneurship SAE
Role of Agribusiness	ABS.01 Agricultural Markets	Agribusiness Report	USDA Resources	Career Exploration
Agricultural Businesses	ABS.01 Business Environment	Local Agribusiness Investigation	Local Business Partners	Entrepreneurship Exploration

Unit Assessment

- Agribusiness Investigation
- Local Business Analysis

Unit 11: Basic Economics

Length: 15 Days

Course Competency	AFNR Performance Indicator	Sample Measurement	Teacher Resources	SAE/FFA Connection
Basic Economic Principles	ABS.01 Economic Decision Making	Economics Activity	Farm Credit Resources	Entrepreneurship SAE
Supply and Demand	ABS.01 Market Principles	Supply and Demand Simulation	Economics Curriculum	Agricultural Markets
Consumer Choices	ABS.01 Economic Analysis	Market Scenario Activity	Financial Literacy Resources	Career Readiness

Unit Assessment

- Supply and Demand Project
- Basic Economics Assessment

Unit 12: Agriculture Exploration Capstone

Length: 15 Days

Course Competency	AFNR Performance Indicator	Sample Measurement	Teacher Resources	SAE/FFA Connection
Agriculture Career Exploration	CRP.01 Career Planning & Management	Career Portfolio	AgExplorer	Exploratory SAE
Agricultural Literacy	CRP.04 Communication Skills	Agriculture Presentation	FFA Resources	Leadership Development
Career Goal Development	CRP.02 Personal Responsibility	Goal Setting Plan	LifeKnowledge	Future SAE Planning
Reflection and Growth	CRP.03 Professionalism	Reflection Journal	Teacher Resources	Degree Preparation

Capstone Assessment

Students develop and present an **Agriculture Exploration Portfolio** including:

1. Agricultural Career Investigation
2. FFA Knowledge Record
3. SAE Exploration Plan
4. Animal Science Project
5. Plant Science Project
6. Natural Resources Investigation
7. Agribusiness Activity

8. Leadership Reflection
9. Career Goals Plan
10. Agriculture Presentation

SAE Backbone Model

Quarter	SAE Milestone
Q1	Explore agricultural interests and careers
Q2	Complete introductory plant, animal, or natural resource project
Q3	Develop an exploratory SAE and career inventory
Q4	Present SAE experiences and future agricultural pathway plan

End Goal

Every student completes an **Exploratory SAE**, develops a basic understanding of FFA, agricultural careers, agriscience, animal science, plant science, natural resources, and agribusiness, and is prepared to transition into **Agricultural Science (0132)** and additional AFNR pathway courses.

This course should serve as New Mexico's foundational middle school agricultural education experience and the entry point into the AFNR pathway system.