General Syllabus for Agriscience in Conneaut School District

Text Information: The Science of Agriculture, A Biological Approach 3rd Edition
Ray V Herren, Thomson/Delmar Publisher
Online Text Book: www.pearsonsuccessnet.com

Course Description: Agriscience is meant to give students an opportunity to study science with an emphasis on the world related to agriculture. An in depth study of soils, plants, and animals as well as new technology will be explored with an emphasis on agriculture and food science career training.

Objectives:

- to advance student understanding of the disciplines of science
- to demonstrate knowledge of the scientific method
- to comprehend nonfiction text
- Understand the food and fiber system in a scientific way
- Complete scientific experiments
- Explain why plants are essential for life
- Discuss the importance of animals to humans and the environment

Course Content:

Introduction of Agriculture (approximately 10 hours)

- American Agriculture
- Milestones in Agriculture
- World Agriculture

Soils (approximately 20 hours)

- Rocks and Minerals
- Earth's Resources
- Soil Horizons
- Physical Properties of Soils

Plant Science (approximately 48 hours)

- Plant reproduction
- Plant systems
- Plant growth
- Plant and animal diseases
- Weed science
- Integrated Pest Management
- Science of forestry
- Producing organically grown projects
- Science of fiber production

Animal Science (approximately 48 hours)

- Animal systems
- Animal reproduction
- Animal growth
- Animal diseases
- Animal nutrition
- Science of aquaculture
- Entomology

Food supply and careers (approximately 48 hours)

- Science of food preservation
- Agriculture and the environment
- Safe food supplies
- Science of genetics
- Genetic engineering
- New directions
- Careers in Agriculture

Instructional Outline:

Term 1

Week	Topics Covered	PA anchors
1	Science of Agriculture	S11.A.1.1.1-4
2	Global Agriculture	S11.A.2.2.1-3
3	Rocks and Minerals	
4	Earth's Resources	S11.D.3.1.1-3
5	Soils/ Horizons, make-up	
6	Physical Properties of soil/texture,structure	

Term 2

Week	Topics Covered	PA anchors
7	Plant reproduction/sexual vs assexual	S11.D.3.1.1-3
8	Plant systems/leaves,stems,roots	
9	Plant growth/nutrition	
10	Plant diseases	S11.C.2.1,2
11	Weed science	S11.C.2.2.1
12	Integrated Pest Management	S11.C.3.1-3

Term 3

Week	Topics Covered	PA anchors
13	Science of forestry	S11.C.2.1,2 S11.C.2.2.1 S11.C.3.1-3
14	Organically grown products	S11.D.2.1.1-3
15	Food and fiber production	
16	Animal systems/ skeletal system and muscular systems	
17	Animal systems/digestive systems	
18	Animal systems/digestive and respiratory systems	

Term 4

Week	Topics Covered	PA anchors
19	Animal reproduction/Male and female parts	S11.D.2.1.1-3
20	Animal reproduction/mating, AI, Embryo Transfer and Cloning	S11.D.1.1.2-4
21	Animal growth/ Growth process	
22	Animal nutrition	
23	Animal diseases/diseases and immunity	
24	Agricultural entomology/classification and characteristics	

Term 5

Week	Topics Covered	PA anchors
25	Science of aquaculture	S11.D.1.3.1-4
26	Science of food preservation	
27	Agriculture and the environment	
28	A safe food supply/inspections,hormones,labeling	S11.B.2.1.2,5 S11.B.3.1.1-3 S11.B.3.2.1-3 S11.B.3.3.1-4 S11.D.1.2.1,2
29	Science of genetics	
30	Genetic engineering	

Term 6

Week	Topics Covered	PA anchors
31	New directions in agriculture/renewable resources	S11.B.2.1.2,5 S11.B.3.1.1-3 S11.B.3.2.1-3 S11.B.3.3.1-4 S11.D.1.2.1,2
32	New directions in agriculture/sustainable agriculture	
33	Careers in Agriculture/plants and animals	
34	Career in Agriculuture/natural resources and food sciences	
35	**PSSA Testing and review(week may vary)**	
36	**Wrap up and finals**	