

**Course Title: Agriscience Foundations (edited December 2016)**

**Course #: 8106810**

NGSSS Benchmark	Content Focus	Number of Points Possible	Suggested Cognitive Complexity (per CPALMS)
<del>04.01 (01.01U)- SS.A.3.6</del>	<del>Investigate the origin and history of agriculture and its relationship to science and technology.</del>	<del>1</del>	<del>1 level 1</del>
04.02 (01.02U) SS.A.3.6	Analyze the impact of agriculture on the local, state, national and global economy	2	1 level 1 1 level 2
<del>04.04 SS.A.3.6</del>	<del>Examine the role of the agricultural industry in the interaction of population, food, energy and the environment.</del>	2	<del>1 level 1 1 level 2</del>
Reporting category total		2	
<del>05.01 SC.912.L.17.16</del>	<del>Identify the common causes and prevention of accidents in Agriscience operations.</del>	2	2 level 2
05.02 (02.04U) SC.912.L.17.16	Extract and utilize pertinent information from a container label and/or Material Safety Data Sheet (MSDS) following Environmental Protection Agency (EPA), Worker Protection Standard, and Occupational Safety and Health Agency (OSHA) regulations	1	<del>1 level 1</del> 1 level 2
05.03 Sc.912.L. 17.16	Identify proper disposal of hazardous waste materials and biohazards	3	2 level 1 1 level 2
Reporting category total		4	
6.01 SC.912.L.14	<del>Employ scientific measurement skills.</del>	2	2 level 1
6.02 (03.02U) SC.912.L.14	Demonstrate safe and effective use of common laboratory equipment	2	2 level 1
6.03 (03.03U) USC.912.L.14.3	Identify the parts and functions of plant and animal cells.	4	3 level 2 1 level 3
6.04 SC.912.L.14	<del>Describe the phases of cell reproduction.</del>	2	<del>1 level 1 1 level 2</del>
6.05 (03.05U) SC.912.N.1.1	Implement the scientific method and science process skills through the design and completion of an agriscience research project.	2	2 level 3
6.07 SC.912.L16.17	Investigate DNA and genetics applications in agriscience including the theory of probability.	2	2 level 2 <del>1 level 3</del>
<del>6.08 SC.912.L.17.15</del>	<del>Evaluate advances in biotechnology that impact agriculture (e.g. transgenic crops, biological controls, etc.).</del>	2	<del>1 level 2 1 level 3</del>
Reporting category total		10	

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7.01 SC.912.E.7.4	Research how different climactic and geological activity influences agriculture.	1	1 level 2
<del>7.02 SC.912.L.17.10</del>	<del>Describe various ecosystems as they relate to the agriculture industry.</del>	<del>3</del>	<del>1 level 1 2 level 2</del>
7.03 SC.912.L.17.16	Describe the environmental resources (soil, water, air) necessary for agriculture production.	2	2 level 2
<del>7.04 SC.912.L.17.16</del>	<del>Identify regulatory agencies that impact agricultural practices.</del>	<del>1</del>	<del>1 level 1</del>
<del>7.06 SC.912.L.17.16</del>	<del>Identify conservation practices related to natural resources.</del>	<del>2</del>	<del>1 level 1 1 level 2</del>
<del>SC.912.L.15.1</del>	<del>Scientific theory of evolution supported by evidence...</del>	<del>1</del>	<del>1 level 2</del>
Reporting category total		3	
<del>8.02 SC.L.14.53</del>	<del>Categorize plants based on specific characteristics according to industry and scientific standards</del>	<del>2</del>	<del>2 level 1</del>
8.03 SC.912.L.18.9	Examine the processes of plant growth including photosynthesis and respiration.	1	<del>2 level 1</del> 1 level 2
8.04 (05.04U) SC912.P.8.7	Identify the nutrients required for plant growth from the periodic table and explain their functions.	2	1 level 1 1 level 2
8.06 (05.06U) SC.912.L.14.8	Propagate and grow plants through sexual and/or asexual reproduction	1	<del>1 level 1</del> 1 level 2
8.07 (05.07U) SC.912.L.17.15	Investigate the impacts of various pests and propose solutions for their control.	3	2 level 1 1 level 2
07.03	Solve time, distance, area, volume, rate, proportion, and % problems in agriscience	2	2 level 2
Reporting category total		9	
<del>9.01 SC.912.L.14.11-21</del>	<del>Explain the economic importance of animals and the products obtained from animals.</del>	<del>2</del>	<del>2 level 1</del>
<del>9.02 SC.912.L.15.4</del>	<del>Analyze commercially important livestock breeds in Florida.</del>	<del>2</del>	<del>2 level 1</del>
<del>9.03 SC.912.L.14.11-21</del>	<del>Illustrate correct terminologies for animal species and conditions (e.g. age, sex, etc) within those species.</del>	<del>2</del>	<del>2 level 1</del>
9.04 (06.06U) SC.912.L.14.11 --- 21	Compare and contrast animal welfare issues.	2	1 level 1 1 level 2
<del>9.05 SC.912.L.14.11-21</del>	<del>Investigate the nature and properties of food, fiber, and by products from animals</del>	<del>2</del>	<del>1 level 1 1 level 2</del>
Reporting category total		2	
10.01 (07.01U) MACC.912.S-IC.2	Select and demonstrate proper use of hand tools in agriculture.	1	1 level 1
Reporting category total		1	

<b>Reporting Category 8:</b>			
12.06	<i>Conduct formal and informal meetings using correct parliamentary procedure skills.</i>	1	1 level 1
12.07	<i>Identify the opportunities for leadership development available through the National FFA Organization and/or professional organizations.</i>	2	2 level 1
Reporting category total			

<b>Reporting Category 9:</b>			
13.01	<i>Demonstrate proper safety precautions and use personal protective equipment.</i>	1	1 level 1
13.02	<i>Evaluate food safety responsibilities that occur along the food supply chain.</i>	2	1 level 1 1 level 2
13.03	<i>Explain techniques and procedures for the safe handling of food products.</i>	2	2 level 1
Reporting category total			

Overall percentage for Written Test: 30%

Overall percentage for Performance Tasks 70%

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Overall Percentage for Performance Tasks: 70

<b>Performance Task #1</b>	<b>Parliamentary Procedure</b>
<b>Weighting Percent for this Task</b>	50%
<b>Standard</b>	<b>12.06 Conduct formal and informal meetings using correct parliamentary procedure skills.</b>
<b>Exemplar (If applicable)</b>	n/a
<b>Additional Information</b>	<b>Students will demonstrate ability to properly conduct group meetings using parliamentary procedure.</b>
<b>Suggested Assessment Team</b>	<b>Instructor and peer evaluators.</b>

<b>Performance Task #1</b>	<b>Supervised Agricultural Experience</b>
<b>Weighting Percent for this Task</b>	50%

<b>Standard</b>	<b>11.01 Develop, implement, and maintain work based learning through Supervised Agricultural Experiences (SAE).</b>
<b>Exemplar (If applicable)</b>	n/a
<b>Additional Information</b>	<b>Students will investigate SAE opportunities and develop their individual SAE. They will utilize a record keeping system (theaet.com) to collect, interpret and analyze data.</b>
<b>Suggested Assessment Team</b>	<b>Instructor and adult evaluators.</b>

**Rubrics:**

**Performance Task #1 Parliamentary Procedure**

Criteria	Possible Points	Points Earned
Student demonstrates basic parliamentary skills (Main motion, Amendments, Refer to Committee, Point of Order, Adjourn)	5	
Student demonstrates ability to serve as presiding officer.	2	
Student demonstrates ability to participate in discussion relating to motions.	2	
Student uses appropriate voice level for room and size of group.	1	
	10	

**Performance Task #2 SAE**

Criteria	Possible Points	Points Earned
Description	3	
Time Invested	3	
Final Outcome	3	
Pictures	3	
Essay/Summary	3	
(3 – Mastered, 2 – Needs Improvement, 1 – Not Mastered, 0 – No Evidence)	15	