

**Directions:**

Evaluate the student by checking the appropriate number or letter to indicate the degree of competency. The rating for each task should reflect **employability readiness** rather than the grades given in class.

**Rating Scale:**

- 3 Mastered** – can work independently with no supervision
- 2 Requires Supervision** – can perform job completely with limited supervision
- 1 Not Mastered** – requires instruction and close supervision
- N No Exposure** – no experience or knowledge in this area

<b>3</b>	<b>2</b>	<b>1</b>	<b>N</b>	
				<b>The student has mastered the related competencies of Agricultural Science I and II.</b>

<b>3</b>	<b>2</b>	<b>1</b>	<b>N</b>	<b>A. Nutrition</b>	<b>Notes:</b>
				1. Identify the importance of nutrition to agriculture	
				2. Compare and contrast the digestive systems of livestock	
				3. Describe energy’s role in nutrition	
				4. Describe protein’s role in nutrition	
				5. Describe minerals’ role in nutrition	
				6. Describe vitamins’ role in nutrition	
				7. Describe the role of water in nutrition	
				8. Describe environmental effects on nutrition	
				9. Formulate a ration for different classes of livestock	
				Unit: Demonstrate an understanding of animal nutrition by designing a balanced feeding ration and explaining their selection of ration components in a short written report.	
				Other:	

<b>3</b>	<b>2</b>	<b>1</b>	<b>N</b>	<b>B. Genetics</b>	<b>Notes:</b>
				1. Describe the importance of genetics on agriculture	
				2. Describe the basic building blocks of genetics	
				3. Describe animal cell division	
				4. Describe basic principles of genetics	
				5. Describe selection tools for genetic improvement of beef	
				6. Describe selection tools for genetic improvement of dairy herds	
				7. Describe selection tools for genetic improvement of sheep	
				8. Describe selection tools for genetic improvement of swine	
				Unit: Apply concepts and standards of genetics developed in the unit to place a series of bulls in the	

				order they would select them to breed an imaginary herd of beef cattle and explain their placement in a short written report.	
				Other:	

3	2	1	N	<b>C. Reproduction</b>	<b>Notes:</b>
				1. Identify the importance of reproduction in livestock production	
				2. Describe the hormonal system in livestock reproduction	
				3. Describe the reproductive cycle of common production livestock	
				4. Sequence the fetal developmental stages of livestock	
				5. Describe the effects of the environment on the reproductive cycle	
				6. Describe how management and technology are utilized to affect the reproductive cycle	
				Unit: Demonstrate an understanding of principles of animal reproduction by devising and presenting a time line and oral report that follow a group of livestock and their offspring from preparation for breeding through weaning.	
				Other:	

3	2	1	N	<b>D. Animal Health</b>	<b>Notes:</b>
				1. Identify the importance of animal health in livestock	
				2. Describe aspects of the immune system of domestic livestock	
				3. Describe the diseases of the respiratory system affecting livestock	
				4. Describe the diseases of the gastro-intestinal tract in livestock	
				5. Describe the diseases of the reproductive system in livestock	
				6. Describe the major external and internal parasites of livestock	
				7. Describe animal health quality assurance programs	
				Unit: Apply principles of animal health to design a health management program for a livestock species and present their findings to the class as a written checklist and oral report.	
				Other:	

3	2	1	N	<b>E. Leadership and Personal Development for Advanced Students</b>	<b>Notes:</b>
				1. Develop a resume and complete a job application	
				2. Develop a plan for finding a job	
				3. Describe how to apply and interview for a job	
				4. Describe the characteristics needed to develop desirable personal and social skills	
				5. Describe the importance and process of developing better human relationships	
				Unit: Explore a career area by investigating entry-level job opportunities at a local agricultural business	

				and writing a résumé and letter of application for a position.	
				Other:	

<b>3</b>	<b>2</b>	<b>1</b>	<b>N</b>	<b>D. Using the <i>Missouri Agricultural Record Book for Secondary Students</i></b>	<b>Notes:</b>
				1. Complete forms needed to open the Missouri Agricultural Record Book for Secondary Students	
				2. Complete a budget for the SAE program	
				3. Complete inventory and financial statement forms for the Missouri Agricultural Record Book for Secondary Students	
				4. Complete receipt and expenditure forms in the Missouri Agricultural Record Book for Secondary Students	
				5. Complete additional forms in the Missouri Agricultural Record Book for Secondary Students	
				Unit: Demonstrate the ability to use selected forms in the <i>Missouri Agricultural Record Book for Secondary Students</i> by using a list of sample entries to complete the applicable forms in the book.	
				Other:	