

Animal Science Criticality Survey - 2015

1. Personal Qualities and People Skills					
Answer Options	Nice to Know	Need to Know	Critical to Know	Rating Average	Response Count
Demonstrate a positive work ethic by coming to work every day on time, a willingness to take direction, and motivation to accomplish the task at hand.	0	0	19	3.00	19
Demonstrate integrity by abiding by workplace policies and laws and demonstrating honesty and reliability.	1	3	15	2.74	19
Demonstrate teamwork skills by contributing to the success of the team, assisting others, and requesting help when needed.	1	9	9	2.42	19
Demonstrate positive self-representation skills by dressing appropriately and using language and manners suitable for the workplace.	1	9	9	2.42	19
Demonstrate diversity awareness by working well with all customers and co-workers.	2	8	9	2.37	19
Demonstrate conflict-resolution skills by negotiating diplomatic solutions to interpersonal and workplace issues.	4	7	8	2.21	19
Demonstrate creativity and resourcefulness by contributing new ideas and working with initiative.	5	8	6	2.05	19
<i>answered question</i>					19
<i>skipped question</i>					0

2. Professional Knowledge and Skills					
Answer Options	Nice to Know	Need to Know	Critical to Know	Rating Average	Response Count
Demonstrate effective speaking and listening skills by communicating effectively with customers and employees and following directions.	1	5	13	2.63	19
Demonstrate effective reading and writing skills by reading and interpreting workplace documents and writing clearly.	1	7	11	2.53	19
Demonstrate critical-thinking and problem-solving skills by analyzing and resolving problems that arise in completing assigned tasks.	2	5	12	2.53	19
Demonstrate healthy behaviors and safety skills by following safety guidelines and managing personal health.	3	9	7	2.21	19
Demonstrate understanding of workplace organizations, systems, and climates by identifying "big picture" issues and fulfilling the mission of the workplace.	5	12	2	1.84	19
Demonstrate lifelong-learning skills by continually acquiring new industry-related information and improving professional skills.	5	7	7	2.11	19

Demonstrate job acquisition and advancement skills by preparing to apply for a job and seeking promotion.	5	10	4	1.95	19
Demonstrate time, task, and resource management skills by organizing and implementing a productive plan of work.	2	11	6	2.21	19
Demonstrate mathematical skills by using mathematical reasoning to accomplish tasks	6	9	4	1.89	19
Demonstrate customer service skills by identifying and addressing the needs of all customers and providing helpful, courteous, and knowledgeable service.	4	9	6	2.11	19
<i>answered question</i>					19
<i>skipped question</i>					0

3. Technology Knowledge and Skills					
Answer Options	Nice to Know	Need to Know	Critical to Know	Rating Average	Response Count
Demonstrate proficiency with job-specific technologies by selecting and safely using technological resources to accomplish work responsibilities in a productive manner.	2	10	7	2.26	19
Demonstrate proficiency with information technology by using computers, file management techniques, and software/programs effectively.	3	11	5	2.11	19
Demonstrate proper Internet use and security by using the Internet appropriately for work.	3	14	2	1.95	19
Demonstrate proficiency with telecommunications by selecting and using appropriate devices, services, and applications.	4	13	2	1.89	19
<i>answered question</i>					19
<i>skipped question</i>					0

CONTENT STANDARD 1.0: AGRICULTURE FUNDAMENTALS					
Performance Standard 1.1: Animal Agriculture Industries					
Answer Options	Nice to Know	Need to Know	Critical to Know	Rating Average	Response Count
1.1.1 Explain animal production in Idaho.	2	9	7	2.28	18
1.1.2 Compare and contrast animal production nationally and internationally.	9	6	4	1.74	19
<i>answered question</i>					19
<i>skipped question</i>					0

Performance Standard 1.1: Beef Industry					
Answer Options	Nice to Know	Need to Know	Critical to Know	Rating Average	Response Count
1.2.1 Compare and contrast animal production nationally and internationally	8	5	5	1.83	18
1.2.2 Determine the facility and equipment needs in beef production.	2	9	7	2.28	18
1.2.3 Compare and contrast types of beef production systems.	4	9	5	2.06	18
1.2.4 Compare and contrast grazing systems.	4	9	5	2.06	18
1.2.5 Explain land management practices and the importance of working relationships with land management agencies (Forest Service, BLM, etc.)	6	8	4	1.89	18
<i>answered question</i>					18
<i>skipped question</i>					1

Performance Standard 1.2: Dairy Industry					
Answer Options	Nice to Know	Need to Know	Critical to Know	Rating Average	Response Count
1.3.1 Describe elements of dairy production.	2	10	6	2.22	18
1.3.2 Determine the facility and equipment needs in dairy production.	4	10	4	2.00	18
1.3.3 Compare and contrast types of dairy production systems.	7	7	4	1.83	18
1.3.4 Compare and contrast milking systems.	9	6	3	1.67	18
<i>answered question</i>					18
<i>skipped question</i>					1

Performance Standard 1.4: Other Food Animal Systems					
Answer Options	Nice to Know	Need to Know	Critical to Know	Rating Average	Response Count
1.4.1 Describe the elements of sheep and goat production.	13	3	2	1.39	18
1.4.2 Describe the elements of swine production.	13	3	2	1.39	18
1.4.3 Describe the elements of poultry production.	14	2	2	1.33	18
1.4.4 Describe the elements of aquaculture production.	13	2	3	1.44	18
<i>answered question</i>					18
<i>skipped question</i>					1

Performance Standard 1.5: Equine Industry					
Answer Options	Nice to Know	Need to Know	Critical to Know	Rating Average	Response Count
1.5.1. Describe the elements of the equine industry.	12	4	2	1.44	18
<i>answered question</i>					18
<i>skipped question</i>					1

Performance Standard 1.6: Career Opportunities					
Answer Options	Nice to Know	Need to Know	Critical to Know	Rating Average	Response Count
1.6.1. Research career opportunities in livestock production, please and service animals and animal science.	6	8	4	1.89	18
<i>answered question</i>					18
<i>skipped question</i>					1

CONTENT STANDARD 2.0: NUTRITIONAL REQUIREMENTS FOR LIVESTOCK					
Performance Standard 2.1: Digestive Systems of Domestic Animals					
Answer Options	Nice to Know	Need to Know	Critical to Know	Rating Average	Response Count
2.1.1 Compare and contrast ruminant and mono-gastric digestive systems.	4	11	3	1.94	18
2.1.2 Describe the characteristics and function of a ruminant system.	6	10	2	1.78	18
2.1.3 Describe the characteristics and function of cecum.	9	9	0	1.50	18
2.1.4 Describe the functions of the stomach and the purpose of enzymes present in the stomach.	8	9	1	1.61	18
2.1.5 Describe the functions of each of the three segments of the small intestine.	9	9	0	1.50	18
2.1.6 Describe the functions of the large intestine.	9	9	0	1.50	18
<i>answered question</i>					18
<i>skipped question</i>					1

Performance Standard 2.2: Livestock Feedstuffs					
Answer Options	Nice to Know	Need to Know	Critical to Know	Rating Average	Response Count
2.2.1 Explain the functions of feed and how they supply nutrients to livestock.	4	7	7	2.17	18
2.2.2 Identify, compare and contrast the types of feedstuffs (roughages, concentrates, and supplements/additives).	3	9	6	2.17	18
2.2.3 Distinguish between good quality and poor quality feedstuffs, and examine how processing methods improve digestibility.	3	12	3	2.00	18
2.2.4 Examine storage and feeding practices of feedstuffs.	6	9	2	1.76	17
<i>answered question</i>					18
<i>skipped question</i>					1

Performance Standard 2.3: Balanced Livestock Feed Rations					
Answer Options	Nice to Know	Need to Know	Critical to Know	Rating Average	Response Count
2.3.1 Identify the steps in balancing rations.	8	5	5	1.83	18
2.3.2 Discuss the importance of feed analysis.	6	10	2	1.78	18
2.3.3 Discuss how nutritional information is used in developing rations.	7	7	4	1.83	18
2.3.4 Develop balanced rations using the Pearson Square method.	10	7	1	1.50	18
<i>answered question</i>					18
<i>skipped question</i>					1

CONTENT STANDARD 3.0: LIVESTOCK REPRODUCTIVE SYSTEMS					
Performance Standard 13. Reproductive Systems of Domestic Animals					
Answer Options	Nice to Know	Need to Know	Critical to Know	Rating Average	Response Count
3.1.1 Identify and describe the functions of the male and female reproductive structures.	2	12	4	2.11	18
3.1.2 Explain the phases of reproductive maturity in the life of an animal.	4	8	6	2.11	18
3.1.3 Identify and interpret the signs of estrus in relation to the reproductive cycle.	4	8	6	2.11	18
<i>answered question</i>					18
<i>skipped question</i>					1

Performance Standard 3.2: Natural Animal Reproduction					
Answer Options	Nice to Know	Need to Know	Critical to Know	Rating Average	Response Count
3.2.1 Discuss the importance and explain the basics of animal reproduction.	1	11	6	2.28	18
3.2.2 Construct a diagram of estrogen and progesterone profiles during the estrous cycle.	9	6	3	1.67	18
3.2.3 Discuss the events that occur leading up to, during, and after parturition and describe the problems that may be encountered during parturition.	5	8	5	2.00	18
<i>answered question</i>					18
<i>skipped question</i>					1

Performance Standard 3.3: Animal Reproduction Technology					
Answer Options	Nice to Know	Need to Know	Critical to Know	Rating Average	Response Count
3.3.1 Describe the process of artificial insemination in common agricultural animals, including the collection, evaluation, and handling of semen.	4	8	6	2.11	18
3.3.2 Discuss the advantages and disadvantages of artificial insemination and natural breeding.	5	8	5	2.00	18
3.3.3 Research the process of estrous synchronization, semen sexing, embryo transfer, cloning, and genetic engineering.	7	5	6	1.94	18
<i>answered question</i>					18
<i>skipped question</i>					1

Performance Standard 3.4: Animal Reproduction Management					
Answer Options	Nice to Know	Need to Know	Critical to Know	Rating Average	Response Count
3.4.1 Identify common reproductive diseases that affect animals and determine appropriate prevention and treatment methods.	5	6	7	2.11	18
3.4.2 Discuss reproduction management practices and determine how they affect reproductive performance.	4	9	5	2.06	18
<i>answered question</i>					18
<i>skipped question</i>					1

Performance Standard 3.5: Lactation					
Answer Options	Nice to Know	Need to Know	Critical to Know	Rating Average	Response Count
3.5.1 Discuss reproduction management practices and determine how they affect reproductive performance.	3	9	6	2.17	18
3.5.2 Describe the components of milk and colostrum and their role in newborn livestock.	5	7	6	2.06	18
3.5.3 Examine how factors such as genetics, disease, feed, environment, and body condition affect milk production.	5	9	4	1.94	18
<i>answered question</i>					18
<i>skipped question</i>					1

CONTENT STANDARD 4.0: PRINCIPLES OF EVALUATION FOR ANIMAL SELECTION					
Performance Standard 4.1: Genetics					
Answer Options	Nice to Know	Need to Know	Critical to Know	Rating Average	Response Count
4.1.1 Understand genetics and the impact of Gregor Mendel's development of the basic principles of heredity.	7	9	2	1.72	18
4.1.2 Identify and describe heritable traits.	4	11	3	1.94	18
4.1.3 Explain the principles of dominance and incomplete dominance.	8	7	3	1.72	18
<i>answered question</i>					18
<i>skipped question</i>					1

Performance Standard 4.2: Heritability of Traits					
Answer Options	Nice to Know	Need to Know	Critical to Know	Rating Average	Response Count
4.2.1 Analyze heritability estimates as a selection factor in breeding programs.	7	8	3	1.78	18
4.2.2 Explain the relationship between genotype, environment, and phenotype.	5	10	3	1.89	18
4.2.3 Discuss the advantages of crossbreeding and hybrid vigor in livestock production.	4	8	6	2.11	18
<i>answered question</i>					18
<i>skipped question</i>					1

Performance Standard 4.3: Types and Conformation of Domestic Animals					
Answer Options	Nice to Know	Need to Know	Critical to Know	Rating Average	Response Count
4.3.1 Classify body condition scoring system among the different species.	4	12	2	1.89	18
4.3.2 Interpret performance data when evaluating livestock.	4	10	4	2.00	18
4.3.3 Classify animals and their characteristics based on phenotype.	6	8	4	1.89	18
4.3.4 Identify current industry standards for animal selection according to species.	5	8	5	2.00	18
4.3.5 Evaluate livestock using Expected Progeny Differences (EPD).	5	7	6	2.06	18
<i>answered question</i>					18
<i>skipped question</i>					1

CONTENT STANDARD 5.0: ANIMAL WELFARE, HANDLING, AND QUALITY ASSURANCE					
Performance Standard 5.1: Animal Welfare Philosophies					
Answer Options	Nice to Know	Need to Know	Critical to Know	Rating Average	Response Count
5.1.1 Compare and contrast animal welfare versus the concept of animal rights.	2	9	7	2.28	18
5.1.2 Research and report the basis for general concerns regarding animal welfare.	5	8	5	2.00	18
<i>answered question</i>					18
<i>skipped question</i>					1

Performance Standard 5.2: Animal Behavior					
Answer Options	Nice to Know	Need to Know	Critical to Know	Rating Average	Response Count
5.2.1 Define, compare, and contract the patterns of animal behavior.	5	10	3	1.89	18
5.2.2 Describe various methods of animal behavior modification.	8	6	4	1.78	18
<i>answered question</i>					18
<i>skipped question</i>					1

Performance Standard 5.3: Cultural and Controversial Issues Related to Animal Use and Keep					
Answer Options	Nice to Know	Need to Know	Critical to Know	Rating Average	Response Count
5.3.1 Compare and contrast current controversial issues in animal usage.	1	11	6	2.28	18
5.3.2 Distinguish between fact and propaganda when analyzing animal usage issues and their impact on the environment.	1	6	11	2.56	18
5.3.3 Compare and contrast cultural differences and their impact on animal use.	2	13	3	2.06	18
5.3.4 Examine legislation regarding current animal usage and welfare.	4	6	8	2.22	18
<i>answered question</i>					18
<i>skipped question</i>					1

Performance Standard 5.4: Quality Assurance Standards					
Answer Options	Nice to Know	Need to Know	Critical to Know	Rating Average	Response Count
5.4.1 Research quality assurance standards for Idaho's livestock industry.	4	5	9	2.28	18
5.4.2 Explain how these standards would apply to the livestock industry.	3	7	8	2.28	18
<i>answered question</i>					18
<i>skipped question</i>					1

CONTENT STANDARD 6.0: EVALUATING ANIMAL HEALTH AND ADMINISTERING CARE					
Performance Standard 6.1: Animal Disease Transmission and Immunity					
Answer Options	Nice to Know	Need to Know	Critical to Know	Rating Average	Response Count
6.1.1 Describe the modes of transmission of infectious diseases.	4	8	5	2.06	17
6.1.2 Examine the primary and secondary defenses the body uses to resist disease.	6	6	5	1.94	17
6.1.3 Identify how passive and active immunity can be enhanced by management.	4	6	7	2.18	17
<i>answered question</i>					17
<i>skipped question</i>					2

Performance Standard 6.2: Animal Medications					
Answer Options	Nice to Know	Need to Know	Critical to Know	Rating Average	Response Count
6.2.1 Examine the use of vaccines in disease control.	2	6	9	2.41	17
6.2.2 Examine the types and forms of pharmaceuticals.	2	9	6	2.24	17
6.2.3 Compare appropriate storage methods for medications and recognize how improper storage conditions may affect drugs.	3	8	6	2.18	17
<i>answered question</i>					17
<i>skipped question</i>					2

Performance Standard 6.3: Medication and Care					
Answer Options	Nice to Know	Need to Know	Critical to Know	Rating Average	Response Count
6.3.1 Illustrate methods used to administer vaccines and pharmaceuticals.	1	7	9	2.47	17
6.3.2 Identify the instruments used to administer vaccines and pharmaceuticals.	1	10	6	2.29	17
6.3.3 Describe the types of injections, and determine the appropriate injection sites and dosages.	1	8	8	2.41	17
6.3.4 Examine the components of a label found on animal medication and interpret a veterinarian's prescription.	2	7	8	2.35	17
<i>answered question</i>					17
<i>skipped question</i>					2

Performance Standard 6.4: Parasites					
Answer Options	Nice to Know	Need to Know	Critical to Know	Rating Average	Response Count
6.4.1 Identify common internal and external parasites that affect livestock and describe the diseases that they may spread or cause.	4	7	6	2.12	17
6.4.2 Understand the life cycle of common parasites and how it affects animals.	5	7	5	2.00	17
6.4.3 Recognize the importance of controlling parasites in disease management.	2	9	6	2.24	17
<i>answered question</i>					17
<i>skipped question</i>					2

Performance Standard 6.5: Disease Control and Management					
Answer Options	Nice to Know	Need to Know	Critical to Know	Rating Average	Response Count
6.5.1 Explain how cleanliness affects disease control, and compare antiseptics and disinfectants.	3	11	3	2.00	17
6.5.2 Evaluate vaccination and prevention methods, and describe the types of vaccines available.	2	10	5	2.18	17
<i>answered question</i>					17
<i>skipped question</i>					2

Performance Standard 6.6: Animal Health					
Answer Options	Nice to Know	Need to Know	Critical to Know	Rating Average	Response Count
6.6.1 Interpret animal behavior as related to health.	1	12	4	2.18	17
6.6.2 Discuss beneficial record-keeping programs.	2	11	4	2.12	17
6.6.3 Describe ways of identifying and tracking individual animals.	0	12	5	2.29	17
<i>answered question</i>					17
<i>skipped question</i>					2

CONTENT STANDARD 7.0: EXPLORE HARVESTING AND PROCESSING OF ANIMAL PRODUCTS					
Performance Standard 7.1: Meat Animal Harvesting and Processing					
Answer Options	Nice to Know	Need to Know	Critical to Know	Rating Average	Response Count
7.1.1 Outline the major steps involved in the harvesting of animals.	4	10	3	1.94	17
7.1.2 Identify the wholesale and retail cuts of beef, pork, and lamb.	9	7	1	1.53	17
7.1.3 Identify the edible and inedible by-products of meat animals.	11	4	2	1.47	17
7.1.4 Identify meat processing methods.	8	8	1	1.59	17
<i>answered question</i>					17
<i>skipped question</i>					2

Performance Standard 7.2: Meat Product Quality					
Answer Options	Nice to Know	Need to Know	Critical to Know	Rating Average	Response Count
7.2.1 Identify the wholesale and retail cuts of beef, pork and lamb.	9	7	1	1.53	17
7.2.2 Compare and contrast grading systems of beef, pork and lamb.	6	9	2	1.76	17
7.2.3 Calculate and explain dressing percentages.	6	9	2	1.76	17
<i>answered question</i>					17
<i>skipped question</i>					2

Performance Standard 7.3: Dairy Product Processing					
Answer Options	Nice to Know	Need to Know	Critical to Know	Rating Average	Response Count
7.3.1 Identify dairy quality control standards and requirements.	5	11	1	1.76	17
7.3.2 Identify dairy processing methods.	8	9	0	1.53	17
7.3.3 List and explain the utility of economically important dairy products.	10	6	1	1.47	17
<i>answered question</i>					17
<i>skipped question</i>					2

CONTENT STANDARD 8.0: EXAMINE AGRICULTURAL BUSINESS AND RISK MANAGEMENT					
Performance Standard 8.1: Marketing Process					
Answer Options	Nice to Know	Need to Know	Critical to Know	Rating Average	Response Count
8.1.1 Investigate value-added concepts of marketing.	10	3	4	1.65	17
8.1.2 Understand the concepts of utility to agricultural commodities.	8	5	4	1.76	17
8.1.3 Discuss current industry trends in agriculture marketing.	3	9	5	2.12	17
<i>answered question</i>					17
<i>skipped question</i>					2

Performance Standard 8.2: Market and Sales Analysis					
Answer Options	Nice to Know	Need to Know	Critical to Know	Rating Average	Response Count
8.2.1 Research strength, weakness, opportunities and threats (SWOT) analysis.	7	8	2	1.71	17
8.2.2 Determine a product/client's status in current market.	9	7	1	1.53	17
8.2.3 Discuss the value of accurate product information.	4	7	6	2.12	17
8.2.4 Determine planning assumptions based on market analysis.	5	9	3	1.88	17
8.2.5 Research potential target markets for an agricultural enterprise or product.	4	10	3	1.94	17
<i>answered question</i>					17
<i>skipped question</i>					2

Performance Standard 8.3: Marketing Plan Evaluations					
Answer Options	Nice to Know	Need to Know	Critical to Know	Rating Average	Response Count
8.3.1 Determine the importance of evaluation a marketing plan.	6	9	2	1.76	17
8.3.2 Calculate the financial return of a marketing plan.	5	10	2	1.82	17
<i>answered question</i>					17
<i>skipped question</i>					2

Performance Standard 8.4: Financial Risk Management					
Answer Options	Nice to Know	Need to Know	Critical to Know	Rating Average	Response Count
8.4.1 Define risk management in agricultural enterprises.	4	8	5	2.06	17
8.4.2 Differentiate between operating and capital loans.	4	9	4	2.00	17
8.4.3 Understand the factors that affect the cost of credit and amortize a loan.	5	8	4	1.94	17
8.4.4 Discuss available government programs to reduce financial risk.	6	8	3	1.82	17
8.4.5 Determine how insurance can reduce financial risk.	4	10	3	1.94	17
8.4.6 Compare and contrast leasing and purchasing equipment and real property.	4	9	4	2.00	17
<i>answered question</i>					17
<i>skipped question</i>					2

Performance Standard 8.5: Marketing in Risk Management					
Answer Options	Nice to Know	Need to Know	Critical to Know	Rating Average	Response Count
8.5.1 Discuss how cash markets can influence risk management decisions.	6	7	4	1.88	17
8.5.2 Research the role of futures in marketing decisions.	4	9	4	2.00	17
8.5.3 Compare and contrast hedging as a price risk management strategy.	6	7	4	1.88	17
8.5.4 Examine the role and impact of speculation in price risk management.	8	6	3	1.71	17
<i>answered question</i>					17
<i>skipped question</i>					2

CONTENT STANDARD 9.0: CAREER OPPORTUNITIES IN ANIMAL SCIENCE					
Performance Standard 9.1: Careers in Animal Science					
Answer Options	Nice to Know	Need to Know	Critical to Know	Rating Average	Response Count
9.1.1 Research potential careers in animal science.	3	7	6	2.19	16
9.1.2 Demonstrate employability skills for a career in the animal science industry.	1	5	10	2.56	16
9.1.3 Research additional industry certifications available.	5	7	4	1.94	16
<i>answered question</i>					16
<i>skipped question</i>					3

CONTENT STANDARD 10.0: LEADERSHIP TRAINING THROUGH AGRICULTURAL EDUCATION					
Performance Standard 10.1: Effective Leadership and Participation in Leadership Training					
Answer Options	Nice to Know	Need to Know	Critical to Know	Rating Average	Response Count
10.1.1 Expand leadership experience by participating in a chapter activity.	2	12	1	1.93	15
10.1.2 Participate in a career development event at a local or higher level.	2	9	4	2.13	15
10.1.3 Exhibit leadership skills by demonstrating proper parliamentary procedure.	5	8	2	1.80	15
10.1.4 Participate in a speech or presentation activity.	3	7	5	2.13	15
<i>answered question</i>					15
<i>skipped question</i>					4

Performance Standard 10.2: School and Community Awareness					
Answer Options	Nice to Know	Need to Know	Critical to Know	Rating Average	Response Count
10.2.1 Participate in a school improvement or community development project.	2	9	4	2.13	15
<i>answered question</i>					15
<i>skipped question</i>					4

CONTENT STANDARD 11.0: SUPERVISED AGRICULTURAL EXPERIENCE (SAE) AND PREPARATION OF					
Performance Standard 11.1: Maintain a Supervised Agricultural Experience					
Answer Options	Nice to Know	Need to Know	Critical to Know	Rating Average	Response Count
11.2.1 Accurately maintain SAE record books.	4	9	2	1.87	15
11.2.2 Investigate the proficiency award areas related to SAE program area.	6	7	2	1.73	15
11.2.3 Actively pursue necessary steps to receive higher degrees in FFA.	8	6	1	1.53	15
<i>answered question</i>					15
<i>skipped question</i>					4