

School-Based Agricultural Education Industry Certifications: Part 3—Resources and Regulations¹

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Introduction

The first two publications (#AEC776 “Introduction to Industry Certifications” and #AEC777 “Getting Started”) in this series addressed topics regarding preparation for industry certification exams. Various industry certifications are available to students enrolled in a school-based agricultural education (SBAE) program. Aside from the certifications themselves, this series has also discussed the testing platforms, organizations, and entities that provide industry certification exams for students. Note that different testing platforms have unique registration steps, and certification exams will have a range of costs and fees associated with them.

Certification exam costs and fees can quickly add up, so understanding how to locate materials and resources as the instructor is important in ensuring that students are prepared to take the exams. This document will help teachers identify available materials and resources to support classroom learning and prepare students for their certification exams. Industry certifications offer a wide range of industry-validated content and skills, which can help prepare students for successful careers in all facets of the agricultural industry. As you begin to explore the vast array of resources, be aware of the specific testing protocol

and procedures, including the use of valid and reliable lesson and exam preparation materials.

Where to Find Resources

Many of the testing platforms and providers supply study materials and information on their website pages. For example, Ducks Unlimited uses a testing entity known as iCEV. This testing platform provides secure testing technology and a study guide for the Ducks Unlimited Ecology and Conservation Management certification (n.d.). A similar example would be the Agricultural Mechanics Specialist certification. The issuing provider is known as the Agricultural Education Services and Technology Inc. (AEST) (Dobson, 2020). AEST provides a study guide including educational standards that align with the exam, corresponding numbers to reference those standards, and sample questions (AEST, n.d.-a). Both AEST and iCEV offer many study guides (as seen in Figure 1 and Figure 2), practice tests, and other resources for teachers and students.

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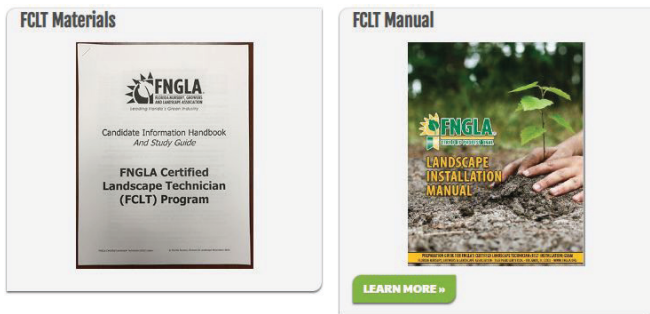
ANIMAL SCIENCE 3.0 STUDY GUIDE

Animal Science certifies that individuals have a knowledge and skill set applicable to the animal sector of the agriculture industry including planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues, health, safety and environmental issues, and the use and care of animal health-care instruments, animal grooming equipment, animal restraining equipment, and laboratory equipment.

The certification standards for the Animal Science exam are based on the standards and benchmarks taught in the Florida's Animal Science program at the secondary level. Each standard is weighted based on industry needs and feedback and are noted below. The number of questions per standard is determined by the industry weight. A complete listing of Florida's Animal Science standards and corresponding benchmarks are available from the Florida Department of Education.

Standard	Description	Resource	Weight
13	Describe animal science and the role of animals in society – the student will be able to:	Modern Livestock and Poultry Production, 8th Edition: Chapter 1	7%
14	Classify animals according to hierarchical taxonomy and agricultural use	Modern Livestock and Poultry Production, 8th Edition: Chapter 2	2%
15	Identify careers in the animal industry	Modern Livestock and Poultry Production, 8th Edition: Chapter 2	5%
16	Describe animal and human first aid and laboratory safety	Modern Livestock and Poultry Production, 8th Edition: Chapter 3	7%
17	Recognize normal and abnormal animal behaviors	Modern Livestock and Poultry Production, 8th Edition: Chapter 3, Chapter 10, Chapter 16	3%
18	Apply principles of comparative anatomy and physiology to uses within various animal systems	Modern Livestock and Poultry Production, 8th Edition: Chapter 5, Chapter 9	8%
19	Evaluate the male and female reproductive systems	Modern Livestock and Poultry Production, 8th Edition: Chapter 10	5%
20	Demonstrate safe animal handling and management techniques	Modern Livestock and Poultry Production, 8th Edition: Chapter 11, Chapter 3	5%
21	Analyze the communities responsibility in options for caring for unwanted/neglected livestock	Modern Livestock and Poultry Production, 8th Edition: Chapter 1	3%
22	Evaluate the importance of the food and fiber system to understand the impact on global economy	Modern Livestock and Poultry Production, 8th Edition: Chapter 1	2%
23	Examine the scope of career opportunities in and the importance of agriculture to the economy	Modern Livestock and Poultry Production, 8th Edition: Chapter 2	8%
27	Apply principles of animal nutrition to ensure the proper growth, development, and reproduction and economic production of animals	Modern Livestock and Poultry Production, 8th Edition: Chapter 6, Chapter 7, Chapter 9	5%
28	Evaluate animals for breeding readiness and soundness	Modern Livestock and Poultry Production, 8th Edition: Chapter 10, Chapter 21, Chapter 26, Chapter 28, Chapter 41, Chapter 42, Chapter 46, Chapter 47	5%
29	Explain the reproductive system and breeding of selected animals	Modern Livestock and Poultry Production, 8th Edition: Chapter 10, Chapter 12, Chapter 15, Chapter 42	5%
30	Prescribe and implement a prevention and treatment program for animal diseases, parasites and other disorders	Modern Livestock and Poultry Production, 8th Edition: Chapter 17, Chapter 23, Chapter 29, Chapter 33, Chapter 44, Chapter 47, Chapter 48	5%
31	Demonstrate knowledge of preventive medicine and disease control	Modern Livestock and Poultry Production, 8th Edition: Chapters 17, 23, 29, 33, 37, 44	8%
32	Select animals for specific purposes and maximum performance based on anatomy and physiology	Modern Livestock and Poultry Production, 8th Edition: Chapter 14, Chapter 21, Chapter 26, Chapter 28, Chapter 25, Chapter 40	5%
33	Prepare, groom, exhibit, and market animals	Modern Livestock and Poultry Production, 8th Edition: Chapter 19, Chapter 25, Chapter 28, Chapter 31, Chapter 35, Chapter 38	4%
34	Maintain and analyze records	Modern Livestock and Poultry Production, 8th Edition: Chapter 7, Chapter 23, Chapter 42, Chapter 47	4%
35	Provide for the biosecurity of agricultural animals and production facilities	Modern Livestock and Poultry Production, 8th Edition: Chapter 3	3%
36	Explain the components of the American business system	Agriculture Fundamentals & Applications, 5th Edition: Unit 26	2%
37	Investigate agricultural cooperatives structure and function	Agriculture Fundamentals & Applications, 5th Edition: Unit 26	2%

Figure 1. Locating Exam Guides through AEST: Exam review guides, like this sample for the Animal Science Specialist certification, can be found by going to the AEST homepage. Click the certifications tab and select the certification you wish to study. Scroll to the bottom of the page and select the “Exam Guide” button.
Credits: AEST (n.d.-c)



Study Help

- FNGLA's plant identification site contains flashcards, and other study materials to help you prepare to take your FNGLA certification exam. The site is located at: www.fnglaplantid.com

Figure 2. Locating Exam Guides Through FNGLA: Exam certification study materials for purchase can be found at FNGLA.org, under “Professional Development.” After clicking the Professional Development tab, you will see a drop-down menu. Select the “Certifications” button. The certifications that FNGLA has to offer should appear on the screen. Select the “Read More” button and scroll. You will see a variety of reviews and study guides as pictured above. It should be noted that there are two free study guides available for the Landscape certifications; however, the manual and other items must be purchased.
Credits: FNGLA (n.d.)

How to Prepare and What to Avoid

Teachers may create their own review using their own notes, tests, and quizzes. However, teachers should not ask students questions about the material on the certification exam to create study guides (Florida Department of

Education, n.d.-d.). This is considered a testing violation and should be reported to the Florida Department of Education within 5 business days (Florida Department of Education, n.d.-b). Other examples of testing violations include, but are not limited to, assisting students with test questions, previewing test material, and taking screenshots/pictures of active exam material. Teachers are prohibited from administering exams to themselves, to students under their direct supervision, or to a family member. It is also prohibited to complete a certification exam under a name other than one's legal name (Florida Department of Education, n.d.-d).

Industry certification tests can be beneficial for both students and teachers. Aside from students receiving the certification, certification exams also award the school-based agricultural education programs with a monetary incentive. Being that industry certifications are monitored by the state, teachers should review testing rules and procedures frequently to avoid any testing indiscretions (Florida Department of Education, n.d.-c).

Issuing providers and organizations that use different testing platforms may also have additional policies and procedures to follow. For example, the providers and organizations that use the AEST testing platform require proctors to register for an account with AEST. Once proctors have been approved and their accounts are activated, the proctors are sent materials from AEST that should be reviewed to prepare for test day (AEST, n.d.-e).

Industry certification exams are a great tool for any agricultural education program. Improper registration and improper use of study materials are simple mistakes that can be made by educators daily, resulting in poor impacts on agricultural education programs. However, those mistakes are completely avoidable and addressed throughout the EDIS series, *School-Based Agricultural Education Industry Certifications*. The three publications supply additional information such as a table of issuing providers and organizations, as well as a brief history of industry certification testing and the CAPE act. This series should be used as a guide and resource for all educators looking to enhance their agricultural education program.

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Appendix: School-Based Agricultural Education Industry Certifications Series

“School-Based Agricultural Industry Certifications: Part 1—Introduction to Industry Certifications”

Introduction to agricultural education industry certifications, testing platforms, and organizations in Florida.

“School-Based Agricultural Industry Certifications: Part 2—Getting Started”

Overview of the Florida testing platforms available, how to register, and important tips to keep in mind.

“School-Based Agricultural Industry Certifications: Part 3—Resources and Regulations”

An overview of resources and how to prepare students for SBAE industry certification exams in Florida.