

NM Public Education Department

AGRICULTURAL STRUCTURES AND CONSTRUCTION

END-OF-COURSE EXAM | GRADE 9-12 | YEAR 17-18

ASSESSMENT BLUEPRINT

Purpose Statement

Agricultural Structures and Construction

The Agricultural Structures and Construction End-of-Course Exam is designed to measure student proficiency of the standards and performance elements aligned to the Common Career Technical Core Standards (https://cte.careertech.org/sites/default/files/CCTC_Standards_Formatted_2014.pdf).

This course-level exam is provided to all students who have completed Agricultural Structures and Construction.

This exam can be given for the following STARS course code:

0152 - Agricultural Structures and Construction

Intended as a final exam for the course, this is a summative exam covering a wide range of content, skills, and applications. Scores are reported to the teacher, school, district, and state levels for the purposes of student grades, curriculum review, and NMTeach summative reports.

New Mexico State University College of Agriculture, Consumer and Environmental Sciences

This blueprint was developed and piloted in 2016 by the New Mexico State University's (NMSU) Secondary Agriculture Education Office (<http://aces.nmsu.edu/>) in partnership with New Mexico agriculture educators. NMSU uses test items with consent from MYCaert, Inc. (<http://www.mycaert.com>). MyCaert has given copyright permissions to the New Mexico Public Education Department (NMPED).

Sample Questions

The NMPED has released sample items (prior test exam questions in the test bank) for each performance element. Due to a limited item bank, only five, EOC specific, sample questions have been provided on the blueprint. The depth of knowledge (DOK) level has also been identified for each sample question.

Blueprint Table—Agricultural Structures and Construction

Based on the Common Career Technical Core Standards

REPORTING CATEGORY	STANDARD	PERFORMANCE ELEMENT
<p>Power, Structural & Technical Systems</p>	<p>AG-PST.1</p>	<p>Performance Element:</p> <p>Apply physical science principles and engineering applications to solve problems and improve performance in AFNR power, structural and technical systems.</p> <p>Sample Questions:</p> <p>1. What is the supply pressure rating for water entering fixtures in a home?</p> <p>A. 10-30 B. 20-40 C. 40-60 * D. 60-80 DOK 1</p> <p>2. What type of switch is always used in pairs to control lights on receptacles from two locations?</p> <p>A. 1-way switches B. 2-way switches C. 3-way switches * D. 4-way switches DOK 1</p>

REPORTING CATEGORY	STANDARD	PERFORMANCE ELEMENT
		<p>3. What is a lightweight plastic pipe used for septic tank leach fields and outside drainage pipe?</p> <p>A. CPVC pipe B. non-code pipe * C. schedule 40 pipe D. PVC pipe</p> <p>DOK 1</p>
	AG-PST.4	<p>Performance Element:</p> <p>Plan, build and maintain AFNR structures.</p> <p>Sample Question:</p> <p>Cellulose is actually a material that may be used for insulation. What products are made of cellulose and how is it best used?</p> <p>A. tree bark – pressed wood B. paper wood – loose fill insulation * C. paper wood – hard board D. styrofoam – foam board</p> <p>DOK 1</p>
	AG-PST.5	<p>Performance Element:</p> <p>Use control, monitoring, geospatial and other technologies in AFNR power, structural and technical systems.</p> <p>Sample Question:</p> <p>What is a permanent point of known or assumed elevation from which leveling surveys are started?</p> <p>A. station B. benchmark * C. backsight</p>

REPORTING CATEGORY	STANDARD	PERFORMANCE ELEMENT
		D. elevation DOK 1
Environmental Service Systems	AG-ENV.3	<p>Performance Element:</p> <p>Develop proposed solutions to environmental issues, problems and applications using scientific principles of meteorology, soil science, hydrology, microbiology, chemistry and ecology.</p>
	AG-ENV.4	<p>Performance Element:</p> <p>Demonstrate the operation of environmental service systems (e.g., pollution control, water treatment, wastewater treatment, solid waste management and energy conservation).</p>

Agricultural Structures and Construction EoC Reporting Category Alignment Framework					
Reporting Category	Standard	DOK (Count by DOK)			Grand Total
		1	2	3	
Environmental Service Systems	AG-ENV.3			2	2
	AG-ENV.4	3			3
Power, Structural & Technical Systems	AG-PST.1	1	21		22
	AG-PST.4	4	5	10	19
	AG-PST.5	1	8		9
Total		9	34	12	55