Agriculture, Food & Natural Resources Course Standards

The Background:

Rules, Regulations, and Minimum Standards of the State Board of Education 0520-01-03-.05(1) calls for the State Board of Education to adopt curriculum standards for each subject area, grades K-12. The approved standards are to be the basis for planning instructional programs in each local school system. Adopted textbooks are also to be aligned with the state curriculum standards. Section 3.205 Approved High School Courses of the State Board of Education Policy identifies those courses which have been approved by the Board for instruction across the state.

The Department of Education's Division of Career and Technical Education (CTE) is proposing changes to approved course standards in the Agriculture, Food & Natural Resources career cluster, which replaced the former Agricultural Education program area. This item includes new and revised courses within this career cluster that are better aligned to postsecondary pathways, incorporate added instructional rigor by embedding Common Core State Standards for English Language Arts & Literacy in Technical Subjects, and better reflect the competitive employment demands of our state. The Division of CTE is preparing for the adoption of textbooks in the Agriculture, Food, & Natural Resources career cluster. The proposed courses will be used as a basis for alignment in the upcoming textbook adoption cycle.

The Division of CTE is also proposing the courses of *Agriscience, Applied Environmental Science*, and *Veterinary Science* satisfy one laboratory science credit required for graduation and *Agricultural Business and Finance* satisfy the Personal Finance requirement for graduation when the teacher has met the requirements to be considered highly qualified and has completed any applicable training.

Courses included in this item:	
Advanced Food Science	New course
Agricultural and Biosystems Engineering	Revised course/updated name
Agricultural Business and Finance	Revised course
Agricultural Power and Equipment	Revised course
Agriscience	Revised course
Applied Environmental Science	New course
Food Science and Safety	New course
Greenhouse Management	Revised course
Introduction to Agricultural Sciences	Revised course/updated name
Landscaping and Turf Science	Revised course/updated name
Large Animal Science	New course
Natural Resource Management	New course
Organizational Leadership and Communications	Revised course/updated name
Plant and Soil Science	Revised course

Courses included in this item:

Principles of Agribusiness	New course
Principles of Agricultural Mechanics	Revised course/updated name
Principles of Food Production	New course
Principles of Plant Science and Hydroculture	New course
Small Animal Science	Revised course/updated name
Supervised Agricultural Experience (SAE)	Revised course
Veterinary Science	Revised course

Since first reading of the standards included in this item, the CTE Division has critically reviewed and accepted feedback from Agriculture educators, CTE Directors, and industry experts received via the <u>CTE.Questions@tn.gov</u> email address and during eight meetings with CTE teachers held in all three grand divisions. The following changes have been made to the Agriculture standards since first reading, based on that feedback:

- Added a standard for poultry within the Large Animal Science course (standard 22). This reflects postsecondary institutions' inclusion of poultry studies within livestock departments, as well as relevant textbook alignments.
- Revised references to Common Core State Standards for Mathematics in the following courses after completing training and reviewing the standards with the Department's math consultant in the Division of Curriculum and Instruction:
 - Advanced Food Science (4, 8, 11, 12 and 24)
 - Agricultural and Biosystems Engineering (6, 8 and 12)
 - o Agricultural Business and Finance (3, 5, 6, 7, 9, 13, 14 and 17)
 - Agricultural Power and Equipment (12,17 and 19)
 - Landscaping and Turf Science (8, 9, 12, 13, 14, 19 and 20)
 - o Large Animal Science (18, 19, 20 and 21)
 - o Natural Resource Management (2)
 - Plant and Soil Science (11)
 - Principles of Agribusiness (8, 9 and 10)
 - Principles of Plant Science and Hydroculture (10, 21 and 22)
 - Small Animal Science (18, 19 and 20)
- Revised language to add clarity to specific standards in the following courses, based on feedback from CTE teachers, Industry Advisory Committee, and other stakeholders:
 - Advanced Food Science (23)
 - Agricultural and Biosystems Engineering (11)
 - Agricultural Power and Equipment (3)
 - Agriscience (1, 3, 4, 5 and 8)
 - Applied Environmental Science (9 and 10)
 - Greenhouse Management (28)
 - Landscape and Turf Science (10 and 11)
 - Large Animal Science (5, 17 and 22)
 - Natural Resources Management (14)
 - o Organizational Leadership and Communications (1 and 16)
 - Principles of Agribusiness (5, 7 and 13)

- Principles of Food Production (17)
- o Supervised Agricultural Experience (6 and 8)
- Veterinary Science (19)
- Made slight formatting updates for consistency across documents.

The Recommendation:

The Department of Education recommends adoption of this item on final reading. The SBE staff concurs with this recommendation.