

FOOD SCIENCE TECHNOLOGY CURRICULUM FRAMEWORK



This document was prepared by:

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INTRODUCTION

The Nevada CTE Curriculum Frameworks are a resource for Nevada's public and charter schools to design, implement, and assess their CTE programs and curriculum. The content standards identified in this document are listed as a model for the development of local district programs and curriculum. They represent rigorous and relevant expectations for student performance, knowledge, and skill attainment which have been validated by industry representatives.

The intent of this document is to provide a resource to districts as they develop and implement CTE programs and curricula.

This program ensures the following thresholds are met:

- The CTE course and course sequence teaches the knowledge and skills required by industry through applied learning methodology and, where appropriate, work-based learning experiences that prepare students for careers in high-wage, high-skill and/or high-demand fields. Regional and state economic development priorities shall play an important role in determining program approval. Some courses also provide instruction focused on personal development.
- The CTE course and course sequence includes leadership and employability skills as an integral part of the curriculum.
- The CTE course and course sequence are part of a rigorous program of study and include sufficient technical challenge to meet state and/or industry-standards.

The CTE program components include the following items:

- Program of Study
- State Skill Standards
- Employability Skills for Career Readiness Standards
- Career Technical Student Organizations (CTSO)
- Curriculum Framework
- CTE Assessments:
 - Workplace Readiness Skills Assessment
 - End-of-Program Technical Assessment
- Certificate of Skill Attainment
- CTE Endorsement on a High School Diploma
- CTE College Credit

**NEVADA DEPARTMENT OF EDUCATION
CURRICULUM FRAMEWORK FOR
ANIMAL SCIENCE**

PROGRAM TITLE:	FOOD SCIENCE TECHNOLOGY
STATE SKILL STANDARDS:	FOOD SCIENCE TECHNOLOGY
STANDARDS REFERENCE CODE:	FST
CAREER CLUSTER:	AGRICULTURE, FOOD AND NATURAL RESOURCES
CAREER PATHWAY:	FOOD PRODUCTS AND PROCESSING SYSTEMS
PROGRAM LENGTH:	3 LEVELS (L1, L2, L3C)
PROGRAM ASSESSMENT	FOOD SCIENCE TECHNOLOGY WORKPLACE READINESS SKILLS
CTSO:	FFA
GRADE LEVEL:	9-12
AVAILABLE INDUSTRY CERTIFICATIONS/LICENSES:	SERVSAFE

PROGRAM PURPOSE

The purpose of this program is to prepare students for postsecondary education and/or employment in the Animal Science industry.

The program includes the following state standards:

- Nevada CTE Skill Standards: Animal Science
- Employability Skills for Career Readiness
- Nevada Academic Content Standards (alignment shown in the Nevada CTE Skill Standards):
 - Science (based on the Next Generation Science Standards)
 - English Language Arts (based on the Common Core State Standards)
 - Mathematics (based on the Common Core State Standards)
- Common Career Technical Core (alignment shown in the Nevada CTE Skill Standards)

CAREER CLUSTERS

The National Career Clusters™ Framework provides a vital structure for organizing and delivering quality CTE programs through learning and comprehensive programs of study (POS). In total, there are 16 Career Clusters in the National Career Clusters™ Framework, representing more than 79 Career Pathways to help students navigate their way to greater success in college and career. As an organizing tool for curriculum design and instruction, Career Clusters™ provide the essential knowledge and skills for the 16 Career Clusters™ and their Career Pathways.*

*Cite: National Association of State Directors of Career Technical Education Consortium. (2012). Retrieved from <http://www.careertech.org/career-clusters/glance/careerclusters.html>

PROGRAM OF STUDY

The program of study illustrates the sequence of academic and career and technical education coursework that is necessary for the student to successfully transition into postsecondary educational opportunities and employment in their chosen career path. (NAC 389.803)

PROGRAM STRUCTURE

The core course sequencing provided in the following table serves as a guide to schools for their programs of study. Each course is listed in the order in which it should be taught and has a designated level. Complete program sequences are essential for the successful delivery of all state standards in each program area.

FOOD SCIENCE TECHNOLOGY	
Core Course Sequence with Complementary Courses	
COURSE NAME	LEVEL
Agriculture Science I	L1
Agriculture Science II	L2
Food Science Technology	L3C
Food Science Technology Advanced Studies *	AS

* Complimentary Courses

STATE SKILL STANDARDS

The state skill standards are designed to clearly state what the student should know and be able to do upon completion of an advanced high school career and technical education (CTE) program. The standards are designed for the student to complete all standards through their completion of a program of study. The standards are designed to prepare the student for the end-of-program technical assessment directly aligned to the standards. (Paragraph (a) of Subsection 1 of NAC 389.800)

EMPLOYABILITY SKILLS FOR CAREER READINESS STANDARDS

Employability skills, often referred to as “soft skills”, have for many years been a recognizable component of the standards and curriculum in career and technical education programs. The twenty-one standards are organized into three areas: (1) Personal Qualities and People Skills; (2) Professional Knowledge and Skills; and (3) Technology Knowledge and Skills. The standards are designed to ensure students graduate high school properly prepared with skills employers prioritize as the most important. Instruction on all twenty-one standards must be part of each course of the CTE program. (Paragraph (d) of Subsection 1 of NAC 389.800)

CURRICULUM FRAMEWORK

The Nevada CTE Curriculum Frameworks are organized utilizing the recommended course sequencing listed in the Program of Study and the CTE Course Catalog. The framework identifies the recommended content standards, performance standards, and performance indicators that should be taught in each course.

CAREER AND TECHNICAL STUDENT ORGANIZATIONS (CTSOS)

To further the development of leadership and technical skills, students must have opportunities to participate in one or more of the Career and Technical Student Organizations (CTSOS). CTSOs develop character, citizenship, and the technical, leadership and teamwork skills essential for the workforce and their further education. Their activities are considered a part of the instructional day when they are directly related to the competencies and objectives in the course. (Paragraph (a) of Subsection 3 of NAC 389.800)

WORKPLACE READINESS SKILLS ASSESSMENT

The Workplace Readiness Skills Assessment has been developed to align with the Nevada CTE Employability Skills for Career Readiness Standards. This assessment provides a measurement of student employability skills attainment. Students who complete a program will be assessed on their skill attainment during the completion level course. Completion level courses are identified by the letter “C”. (e.g., Level = L3C) (Paragraph (d) of Subsection 1 of NAC 389.800)

END-OF-PROGRAM TECHNICAL ASSESSMENT

An end-of-program technical assessment has been developed to align with the Nevada CTE Skill Standards for this program. This assessment provides a measurement of student technical skill attainment. Students who complete a program will be assessed on their skill attainment during the completion level course. Completion level courses are identified by the letter “C”. (e.g., Level = L3C) (Paragraph (e) of Subsection 1 of NAC 389.800)

CERTIFICATE OF SKILL ATTAINMENT

Each student who completes a course of study must be awarded a certificate which states that they have attained specific skills in the industry being studied and meets the following criteria: A student must maintain a 3.0 grade point average in their approved course of study, pass the Workplace Readiness Skills Assessment, and pass the end-of-program technical assessment. (Subsection 4 of NAC 389.800)

CTE ENDORSEMENT ON A HIGH SCHOOL DIPLOMA

A student qualifies for a CTE endorsement on their high school diploma after successfully completing the following criteria: 1) successful completion of a CTE course of study in a program area, 2) successful completion of academic requirements governing receipt of a standard diploma, and 3) meeting all requirements for the issuance of the Certificate of Skill Attainment. (NAC 389.815)

CTE COLLEGE CREDIT

CTE College Credit is awarded to students based on articulation agreements established by each college for the CTE program, where the colleges will determine the credit value of a full high school CTE program based on course alignment. An articulation agreement will be established for each CTE program designating the number of articulated credits each college will award to students who complete the program.

CTE College Credit is awarded to students who: (1) complete the CTE course sequence with a grade-point average of 3.0 or higher; (2) pass the state end-of-program technical assessment for the program; and (3) pass the Workplace Readiness Assessment for employability skills.

Pre-existing articulation agreements will be recognized until new agreements are established according to current state policy and the criteria shown above.

Please refer to the local high school's course catalog or contact the local high school counselor for more information. (Paragraph (b) of Subsection 3 of NAC 389.800)

ACADEMIC CREDIT FOR CTE COURSEWORK

Career and technical education courses meet the credit requirements for high school graduation (1 unit of arts and humanities or career and technical education). Some career and technical education courses meet academic credit for high school graduation. Please refer to the local high school's course catalog or contact the local high school counselor for more information. (NAC 389.672)

CORE COURSE:**RECOMMENDED STUDENT PERFORMANCE STANDARDS**

COURSE TITLE:	Agriculture Science I
ABBR. NAME:	AG SCIENCE I
CREDITS:	1
LEVEL:	L1
CIP CODE:	01.0000
PREREQUISITE:	None
CTSO:	FFA
COURSE DESCRIPTION	
<p>This course is an introduction and survey course of the many career areas in agriculture. Topics include scientific investigations in agriculture, basic animal science, basic plant and soil science, ornamental horticulture, natural resource management, business management, leadership and communication through FFA, and career skills. An essential part of this course will be leadership activities and Supervised Agriculture Experience Programs.</p>	

TECHNICAL STANDARDS**CONTENT STANDARD 1.0 : EXAMINE THE ROLE OF AGRICULTURE IN SOCIETY**

Performance Standard 1.1 : Recognize the Role of Agriculture in Society

Performance Indicators : 1.1.1-1.1.6

Performance Standard 1.2 : Understand the History of Production Agriculture

Performance Indicators : 1.2.1-1.2.3

Performance Standard 1.3 : Explore the World Food Supply

Performance Indicators : 1.3.1-1.3.2

CONTENT STANDARD 2.0 : DEVELOP LEADERSHIP AND COMMUNICATION SKILLS THROUGH PARTICIPATION IN FFA

Performance Standard 2.1 : Understand the History and Organization of FFA

Performance Indicators : 2.1.1-2.1.4

Performance Standard 2.2 : Understand the Opportunities in FFA

Performance Indicators : 2.2.1-2.2.3

Performance Standard 2.3 : Properly Use Skills in Parliamentary Procedure

Performance Indicators : 2.3.1-2.3.3

Performance Standard 2.4 : Understand the Importance of School and Community Awareness

Performance Indicators : 2.4.1-2.4.3

CONTENT STANDARD 3.0 : DEVELOP A SUPERVISED AGRICULTURAL EXPERIENCE (SAE) PROGRAM

Performance Standard 3.1: Understand The Benefits of an SAE Program

Performance Indicators: 3.1.1-3.1.5

Performance Standard 3.2 : Understand the Benefits of SAE Records

Performance Indicators: 3.2.1-3.2.4

CONTENT STANDARD 4.0 : EXPLORING SCIENTIFIC INVESTIGATION IN AGRICULTURE

Performance Standard 4.1 : Design and Conduct Agricultural Research

Performance Indicators : 4.1.1-4.1.2

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Performance Standard 4.2 : Report Agricultural Research

Performance Indicators : 4.2.1-4.2.3

Performance Standard 4.3 : Understand Scientific Measurement

Performance Indicators : 4.3.1-4.3.3

Performance Standard 4.4 : Use Laboratory Tools and Equipment

Performance Indicators : 4.4.1-4.4.5

Performance Standard 4.5 : Explore Careers in Agricultural Science

Performance Indicators : 4.5.1-4.5.2

CONTENT STANDARD 5.0 : DEVELOP AN UNDERSTANDING OF THE ANIMAL SCIENCE INDUSTRY

Performance Standard 5.1 : Explore and Evaluate the Livestock Industry

Performance Indicators : 5.1.1-5.1.4

Performance Standard 5.2 : Understand Animal Cellular Biology

Performance Indicators : 5.2.1-5.2.2

Performance Standard 5.7 : Explore Careers in Animal Science

Performance Indicators : 5.7.1-5.7.2

CONTENT STANDARD 6.0 : UNDERSTANDING PLANT SCIENCE

Performance Standard 6.1 : Identify Different Plant Classification Systems

Performance Indicators : 6.1.1-6.1.3

Performance Standard 6.2 : Identify Parts and Functions of Plant Cells

Performance Indicators : 6.2.1-6.2.3

Performance Standard 6.3 : Understand Plant Physiology

Performance Indicators : 6.3.1-6.3.4

Performance Standard 6.4 : Understand Flower Anatomy

Performance Indicators : 6.4.1-6.4.4

Performance Standard 6.5 : Understand Plant Propagation

Performance Indicators : 6.5.1-6.5.3

Performance Standard 6.6 : Understand Plant Nutrition and Health

Performance Indicators : 6.6.1-6.6.5

Performance Standard 6.7 : Explore Careers in Plant Science

Performance Indicators : 6.7.1-6.7.2

EMPLOYABILITY SKILLS FOR CAREER READINESS STANDARDS

CONTENT STANDARD 1.0 : DEMONSTRATE EMPLOYABILITY SKILLS FOR CAREER READINESS

Performance Standard 1.1 : Demonstrate Personal Qualities and People Skills

Performance Indicators : 1.1.1-1.1.7

Performance Standard 1.2 : Demonstrate Professional Knowledge and Skills

Performance Indicators : 1.2.1-1.2.10

Performance Standard 1.3 : Demonstrate Technology Knowledge and Skills

Performance Indicators : 1.3.1-1.3.4

ALIGNMENT TO THE NEVADA ACADEMIC CONTENT STANDARDS*

English Language Arts: Reading Standards for Literacy in Science and Technical Subjects
Writing Standards for Literacy in Science and Technical Subjects
Speaking and Listening

Mathematics: Mathematical Practices

Science: Nature of Science
Physical Science
Life Science
Earth and Space

* Refer to the Agriculture Science I and II Standards for alignment by performance indicator

**CORE COURSE:
RECOMMENDED STUDENT PERFORMANCE STANDARDS**

COURSE TITLE:	Agriculture Science II
ABBR. NAME:	AG SCIENCE II
CREDITS:	1
LEVEL:	L2
CIP CODE:	01.0000
PREREQUISITE:	Agriculture Science I
CTSO:	FFA
COURSE DESCRIPTION	
<p>This course is a continuation of Agriculture Science I. This course allows intermediate students to expand on skills and knowledge from Agriculture Science I. Areas of study include scientific investigations in agriculture, plant and soil sciences, agriculture sales and marketing, ornamental horticulture, animal sciences and natural resource management. An essential part of this course will be leadership activities and Supervised Agriculture Experience Programs. The appropriate use of technology and industry-standard equipment is an integral part of this course.</p>	

TECHNICAL STANDARDS

CONTENT STANDARD 2.0 : DEVELOP LEADERSHIP AND COMMUNICATION SKILLS THROUGH PARTICIPATION IN FFA

Performance Standard 2.2 : Understand the Opportunities in FFA

Performance Indicators : 2.2.1-2.2.3

Performance Standard 2.3 : Properly Use Skills in Parliamentary Procedure

Performance Indicators : 2.3.1-2.3.3

Performance Standard 2.4 : Understand the Importance of School and Community Awareness

Performance Indicators : 2.4.1-2.4.3

CONTENT STANDARD 3.0 : DEVELOP A SUPERVISED AGRICULTURAL EXPERIENCE (SAE) PROGRAM

Performance Standard 3.1 : Understand The Benefits of an SAE Program

Performance Indicators : 3.1.1-3.1.5

Performance Standard 3.2 : Understand the Benefits of SAE Records

Performance Indicators : 3.2.1-3.2.4

CONTENT STANDARD 5.0 : DEVELOP AN UNDERSTANDING OF THE ANIMAL SCIENCE INDUSTRY

Performance Standard 5.2 : Understand Animal Cellular Biology

Performance Indicators : 5.2.3-5.2.7

Performance Standard 5.3 : Explore Reproductive Physiology and Breeding Systems

Performance Indicators : 5.3.1-5.3.3

Performance Standard 5.4 : Understand Animal Nutrition

Performance Indicators : 5.4.1-5.4.2

Performance Standard 5.5 : Understand Animal Health Management

Performance Indicators : 5.5.1-5.5.4

Performance Standard 5.6 : Explore Animal Welfare Issues

Performance Indicators : 5.6.1-5.6.3

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CONTENT STANDARD 7.0 : EXPLORING SOIL SCIENCE

Performance Standard 7.1 : Understand Soil Texture and Structure

Performance Indicators : 7.1.1-7.1.4

Performance Standard 7.2 : Understand Soil Erosion

Performance Indicators : 7.2.1-7.2.2

Performance Standard 7.3 : Explore Careers in Soil Science

Performance Indicators : 7.3.1-7.3.2

CONTENT STANDARD 8.0 : EXPLORING ORNAMENTAL HORTICULTURE

Performance Standard 8.1 : Understand the Basic Principles of Landscape Design

Performance Indicators : 8.1.1-8.1.4

Performance Standard 8.2 : Understand the Basic Principles of Greenhouse Management

Performance Indicators : 8.2.1-8.2.5

Performance Standard 8.3 : Understand the Basic Principles of Floriculture

Performance Indicators : 8.3.1-8.3.4

Performance Standard 8.4 : Explore Careers in Ornamental Horticulture

Performance Indicators : 8.4.1-8.4.2

CONTENT STANDARD 9.0 : EXPLAIN BASIC SALES AND MARKETING CONCEPTS FOR AGRICULTURE PRODUCTS

Performance Standard 9.1 : Demonstrate an Understanding of Agricultural Marketing

Performance Indicators : 9.1.1-9.1.5

Performance Standard 9.2 : Understand the Principles of Agricultural Sales

Performance Indicators : 9.2.1-9.2.6

Performance Standard 9.3 : Explore Careers in Sales and Marketing

Performance Indicators : 9.3.1-9.3.2

CONTENT STANDARD 10.0 : UNDERSTAND THE RELATIONSHIP BETWEEN AGRICULTURE AND NATURAL RESOURCE MANAGEMENT

Performance Standard 10.1 : Explore Types of Natural Resources

Performance Indicators : 10.1.1-10.1.3

Performance Standard 10.2 : Understand Human Demand on Natural Resources

Performance Indicators : 10.2.1-10.2.3

Performance Standard 10.3 : Comprehend Natural Resource Conservation

Performance Indicators : 10.3.1-10.3.3

Performance Standard 10.4 : Understand Ecology and Ecosystems

Performance Indicators : 10.4.1-10.4.4

Performance Standard 10.5 : Explore Principles of Rangeland Management

Performance Indicators : 10.5.1-10.5.5

Performance Standard 10.6 : Explore Careers in Natural Resource Management

Performance Indicators : 10.6.1-10.6.2

EMPLOYABILITY SKILLS FOR CAREER READINESS STANDARDS**CONTENT STANDARD 1.0 : DEMONSTRATE EMPLOYABILITY SKILLS FOR CAREER READINESS**

Performance Standard 1.1 : Demonstrate Personal Qualities and People Skills

Performance Indicators : 1.1.1-1.1.7

Performance Standard 1.2 : Demonstrate Professional Knowledge and Skills

Performance Indicators : 1.2.1-1.2.10

Performance Standard 1.3 : Demonstrate Technology Knowledge and Skills

Performance Indicators : 1.3.1-1.3.4

ALIGNMENT TO THE NEVADA ACADEMIC CONTENT STANDARDS*

English Language Arts: Reading Standards for Literacy in Science and Technical Subjects
Writing Standards for Literacy in Science and Technical Subjects
Speaking and Listening

Mathematics: Mathematical Practices

Science: Nature of Science
Physical Science
Life Science
Earth and Space

* Refer to the Agriculture Science I and II Standards for alignment by performance indicator

**CORE COURSE:
RECOMMENDED STUDENT PERFORMANCE STANDARDS**

COURSE TITLE:	FOOD SCIENCE TECHNOLOGY
ABBR. NAME:	FST
CREDITS:	1
LEVEL:	L3C
CIP CODE:	01.1002
PREREQUISITE:	Agriculture Science II
CTSO:	FFA
COURSE DESCRIPTION	
<p>This course is a continuation of Agriculture Science II. This course allows advanced students to expand on skills and knowledge from Agriculture Science II while exploring the livestock and red meat industry. This course covers the basic anatomy and physiology of domestic animals, genetics, reproduction, animal health and welfare, evaluation and selection of animals, land stewardship and marketing. An essential part of this course will be leadership activities and Supervised Agriculture Experience Programs. The appropriate use of technology and industry-standard equipment is an integral part of this course. Upon successful completion of this course, students will have acquired entry-level skills for employment in this field.</p>	

TECHNICAL STANDARDS

CONTENT STANDARD 1.0 : FOOD INDUSTRY AND HISTORICAL DEVELOPMENT

Performance Standard 1.1 : Evaluate the Significance and Implications of Changes and Trends in the Food Products and Processing Industry

Performance Indicators : 1.1.1-1.1.3

Performance Standard 1.2 : Investigate Industry Organizations, Groups and Regulatory Agencies Affecting the Food Products and Processing Industry

Performance Indicators : 1.2.1-1.2.4

CONTENT STANDARD 2.0 : FOOD SAFETY AND SANITATION

Performance Standard 2.1 : Manage Operational Procedures and Create Equipment and Facility Maintenance Plans

Performance Indicators : 2.1.1-2.1.3

Performance Standard 2.2 : Implement Hazard Analysis and Critical Control Point (HACCP) Procedures to Establish Operating Parameters

Performance Indicators : 2.2.1-2.2.3

Performance Standard 2.3 : Apply Safety and Sanitation Procedures in the Handling, Processing and Storing of Food Products

Performance Indicators : 2.3.1- 2.3.5

Performance Standard 2.4 : Demonstrate Worker Safety Procedures with Food Product and Processing Equipment and Facilities

Performance Indicators : 2.4.1- 2.4.6

CONTENT STANDARD 3.0 : THE SCIENCE OF FOOD PRODUCTS AND PROCESSING

Performance Standard 3.1 : Apply Principles of Science to Food Processing to Provide a Safe, Wholesome, and Nutritious Food Supply

Performance Indicators : 3.1.1-3.1.6

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CONTENT STANDARD 4.0 : FOOD SELECTION AND PROCESSING

Performance Standard 4.1 : Utilize Harvesting, Selection, and Inspection Techniques to Obtain Quality Food Products for Processing

Performance Indicators : 4.1.1-4.1.4

Performance Standard 4.2 : Evaluate, Grade, and Classify Processed Food Products

Performance Indicators : 4.2.1-4.2.3

CONTENT STANDARD 5.0 : FOOD PROCESSING AND PRESERVATION

Performance Standard 5.1 : Process and Preserve Food and Food Products For Sale and Distribution

Performance Indicators : 5.1.1-5.1.6

Performance Standard 5.2 : Present Food and Food Products For Sale and Distribution

Performance Indicators : 5.2.1-5.2.3

CONTENT STANDARD 6.0 : MARKETING AND SALES STRATEGIES

Performance Standard 6.1 : Explain the Basics of Displays

Performance Indicators : 6.1.1-6.1.2

Performance Standard 6.2 : Explain the Basics of Sales

Performance Indicators : 6.2.1-6.2.5

CONTENT STANDARD 7.0 : EXPLORE CAREER OPPORTUNITIES

Performance Standard 7.1 : Understand Employment Fields in the Food Science Technology Industry

Performance Indicators : 7.1.1-7.1.3

CONTENT STANDARD 8.0 : LEADERSHIP TRAINING IN FFA

Performance Standard 8.1 : Recognize the Traits of Effective Leaders and Participate in Leadership Training Through Involvement in FFA

Performance Indicators : 8.1.1-8.1.3

Performance Standard 8.2 : Understand the Importance of School and Community Awareness

Performance Indicators : 8.2.1

CONTENT STANDARD 9.0 : SUPERVISED AGRICULTURAL EXPERIENCE (SAE)

Performance Standard 9.1 : Understand the Benefits of an SAE Program

Performance Indicators : 9.1.1-9.1.3

EMPLOYABILITY SKILLS FOR CAREER READINESS STANDARDS**CONTENT STANDARD 1.0 : DEMONSTRATE EMPLOYABILITY SKILLS FOR CAREER READINESS**

Performance Standard 1.1 : Demonstrate Personal Qualities and People Skills

Performance Indicators : 1.1.1-1.1.7

Performance Standard 1.2 : Demonstrate Professional Knowledge and Skills

Performance Indicators : 1.2.1-1.2.10

Performance Standard 1.3 : Demonstrate Technology Knowledge and Skills

Performance Indicators : 1.3.1-1.3.4

ALIGNMENT TO THE NEVADA ACADEMIC CONTENT STANDARDS*

English Language Arts: Reading Standards for Literacy in Science and Technical Subjects
Writing Standards for Literacy in Science and Technical Subjects
Speaking and Listening
Language

Mathematics: Mathematical Practices

Science: Nature of Science
Physical Science
Life Science

* Refer to the Food Science Technology Standards for alignment by performance indicator

COMPLIMENTARY COURSE(S):

Programs that utilize the complementary courses can include the following courses. The Advanced Studies course allows for additional study through investigation and in-depth research.

COURSE TITLE:	Food Science Technology Advanced Studies
ABBR. NAME:	FOOD SCIENCE TECHNOLOGY AS
CREDITS:	1
LEVEL:	AS
CIP CODE:	01.1002
PREREQUISITE:	Agriculture Science II
CTSO:	FFA
COURSE DESCRIPTION	
<p>This course is offered to students who have achieved all content standards in a program whose desire is to pursue advanced study through investigation and in-depth research. Students are expected to work independently or in a team and consult with their supervising teacher for guidance. The supervising teacher will give directions, monitor, and evaluate the students' topic of study. Coursework may include various work-based learning experiences such as internships and job shadowing, involvement in a school-based enterprise, completion of a capstone project, and/or portfolio development. This course may be repeated for additional instruction and credit.</p>	

TECHNICAL STANDARDS

Students have achieved all program content standards and will pursue advanced study through investigation and in-depth research.

EMPLOYABILITY SKILLS FOR CAREER READINESS STANDARDS

Students have achieved all program content standards and will pursue advanced study through investigation and in-depth research.

SAMPLE TOPICS

- Participate in individual/team competitions (Career Development Events)
- Interpret quality assurance test results and apply corrective procedures
- Participation in work based learning (SAE) opportunities
- Explore college and career opportunities
- Demonstrate proper record keeping in a food products and processing system