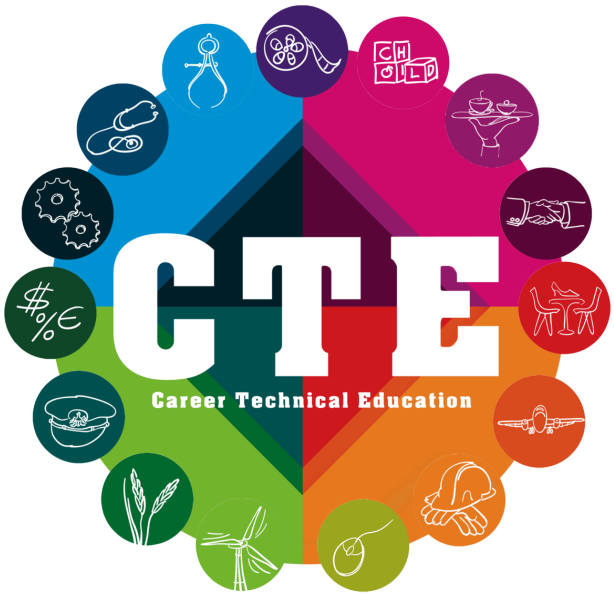
# Career and Technical Education




# *Curriculum*

2025-2026
School District of Holmen
Holmen, WI

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# Career and Technical Education (CTE) Executive Summary

School District of Holmen

The Career and Technical Education (CTE) Committee has developed a framework that defines the vision, purpose, and structure of CTE learning in the School District of Holmen. This document serves as a roadmap for teachers, administrators, parents, and students—aligning curriculum, instruction, and assessment to the Wisconsin Standards for Career and Technical Education (2024) and the Wisconsin Career Readiness Standards. It ensures all students have access to relevant, hands-on learning that prepares them for college, career, and community success

CTE in Holmen empowers students to explore and develop the knowledge, skills, and habits needed for life after high school. Programs provide rigorous, engaging, and applied learning opportunities across multiple pathways including Agriculture, Food, and Natural Resources; Business and Information Technology; Health Science; Family & Consumer Sciences;  Marketing, Management, and Entrepreneurship; and Technology & Engineering Education. The curriculum is dynamic and responsive to workforce needs and emerging technologies.

Wisconsin's CTE Standards emphasize creativity, critical thinking, communication, collaboration, career development, and community engagement. These standards ensure students are career and community ready by integrating technical and academic knowledge within real-world contexts. CTE programs align with state and regional career pathways and provide opportunities for industry-recognized credentials, technical skill attainment (TSA), and dual credit through partnerships with postsecondary institutions.

The knowledge and skills described in these revised sets of standards provide a framework with actionable indicators for CTE classroom experiences. The body of the curriculum is divided by building level, department, and content. The curriculum for each level outlines what the students should know and be able to do. It is student-focused, defining competencies, embedding standards, and outlining assessment expectations. Each unit provides an overview of the content, unit objectives, priority standards, supporting standards, and learning targets to clearly articulate the competencies to be met within the curriculum.

| | |
|---|---|
| Book | Policy Manual |
| Section | 2000 Program |
| Title | CURRICULUM DEVELOPMENT |
| Code | po2210 |
| Status | Active |
| Legal | 118.01, 118.24, 118.30, 121.02(1)(k) and (L), Wis. Stats.<br>PI 8.001(6g)<br>PI 8.01(2)(K) |
| Adopted | January 23, 2023 |
| Last Revised | March 24, 2025 |

2210 - **CURRICULUM DEVELOPMENT**

The Board recognizes its responsibility for the quality of the educational program of the schools. To this end, a District curriculum plan shall be developed, evaluated, and adopted. The plan shall include overall program evaluation processes that provide for evaluation on a continuing basis and shall provide for the review of the evaluation process at least every five (5) years. The District curriculum plan shall include sequential curriculum plans, which provides an organized set of learning experiences that build upon previously acquired knowledge and skills.

For purposes of this policy and consistent communication throughout the District, curriculum shall be defined to include the courses of study, subjects, classes, and organized activities provided by the school.

The Board directs that the curriculum shall be developed and evaluated by the District Administrator, and that curriculum plans and courses of study incorporated into the curriculum of this District:

A. provide instruction in courses consistent with statute and regulations of the Department of Public Instruction or appropriate State agency;

B. ensure, consistent with 115, Wis. Stats., and other applicable Federal and State laws and regulations, that special learning needs of students are provided for in the context of the regular program or classroom and provides for effective coordination with programs or agencies that are needed to meet those needs that cannot be dealt with in the regular program or classroom;

C. be consistent with and designed to achieve the District's philosophy and goals, and ensure the possibility of their achievement;

D. incorporate State-recommended performance standards for students as the basis for determining how well each student is achieving curriculum objectives;

E. allow for the development of individual talents and interests as well as recognizes that learning styles of students may differ;

F. provide a strategy for continuous and cumulative learning through effective articulation at all levels, particularly of those skills identified as essential and life-role skills;

G. utilize a variety of learning resources to accomplish the educational goals;

H. encourage students to utilize school counseling services in their academic and career planning;

I. in the elementary grades, provide regular instruction in reading, language arts, social studies, mathematics, science, health, physical education, art, and music;

J. in grades 5 to 8, provide regular instruction in language arts, social studies, mathematics, science, health, physical education, art, and music;

K. in grades 9 to 12, provide access to an educational program that enables students each year to study English, social studies, mathematics, science, vocational education, foreign language, physical education, art, and music;

L. provide regular instruction in foreign language in grades 7 and 8;

M. in one (1) of grades 5 to 8 and in one (1) of grades 10 to 12, provide students with the instruction on shaken baby syndrome and impacted babies described in 253.15 (5), Wis. Stats.;

N. incorporate instruction in financial literacy into the curriculum in grades kindergarten to 12;

O. at least once in grades 5 to 8 and at least once in grades 9 to 12, include instruction on the Holocaust and other genocides;

P. provide that, in the social studies curriculum, instruction in the history, culture, and tribal sovereignty of Federally-recognized American Indian tribes and bands located in Wisconsin takes place at least twice in the elementary grades and once in the high school grades.

The District Administrator shall make progress reports to the Board annually.

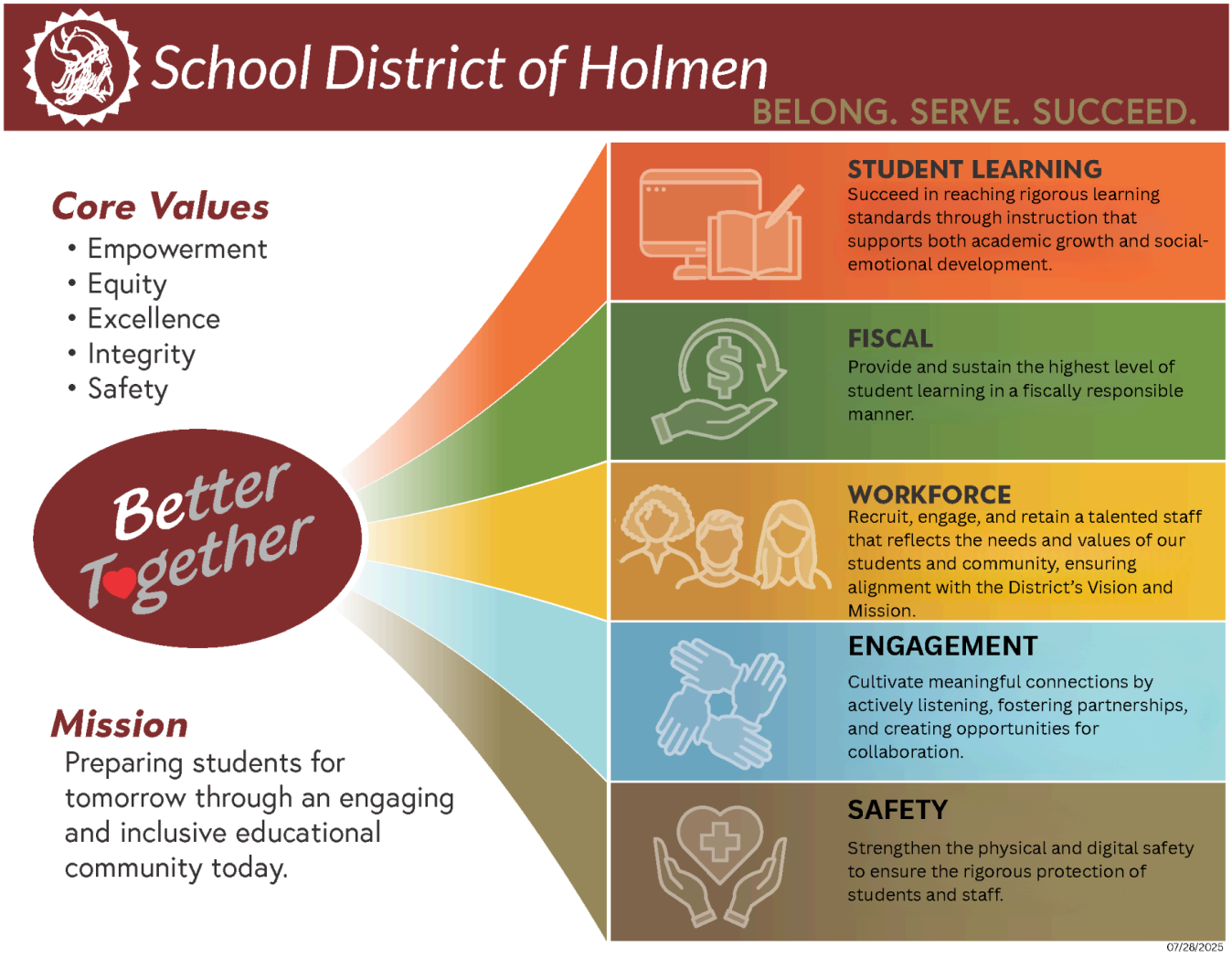
The District Administrator may propose programming using innovative instructional design as deemed to be beneficial or necessary to the continuing growth of the instructional program and to better promote the District's educational goals. Each such innovative program intended to be part of the required hours of instruction must be consistent with State law and implemented consistent with the District's curriculum as approved by the Board.

T.C. 8/15/24

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# District Vision / Mission / Focus Statement

2026-2030 Strategic Plan



# Wisconsin Educator Standards

Based on PI 34.002-Wisconsin Department of Public Instruction

**The Wisconsin Educator Standards identify the knowledge, skills, and dispositions expected of all licensed teachers. They provide a foundation for high-quality instruction, professional growth, and continuous improvement.**

1. **Pupil Development**
   The teacher understands how pupils grow and develop, recognizing that patterns of learning and development vary individually within and across the cognitive, linguistic, social, emotional, and physical areas. The teacher designs and implements developmentally appropriate and challenging learning experiences for pupils.
2. **Learning Differences**
   The teacher uses his or her understanding of individual pupil differences and diverse cultures and communities to ensure inclusive learning environments that enable each pupil to meet high standards.
3. **Learning Environments**
   The teacher works with others to create environments that support individual and collaborative learning, and that encourage positive social interaction, active engagement in learning, and self-motivation.
4. **Content Knowledge**
   The teacher understands the central concepts, tools of inquiry, and structures of each discipline he or she teaches. The teacher creates learning experiences that make the discipline accessible and meaningful for pupils to assure mastery of the content.
5. **Application of Content**
   The teacher understands how to connect concepts and use differing perspectives to engage pupils in critical thinking, creativity, and collaborative problem solving related to authentic local and global issues.
6. **Assessment**
   The teacher understands and uses multiple methods of assessment to engage pupils in their own growth, to monitor pupil progress, and to guide the teacher's and pupil's decision making.
7. **Planning for Instruction**

The teacher plans instruction that supports every pupil in meeting rigorous learning goals by drawing upon knowledge of content areas, curriculum, cross-disciplinary skills, pedagogy, pupils, and pupils' communities.

8. **Instructional Strategies**

   The teacher understands and uses a variety of instructional strategies to encourage pupils to develop a deep understanding of content areas and their connections, and to develop skills to apply knowledge in a meaningful way.

9. **Professional Learning and Ethical Practice**

   The teacher engages in ongoing professional learning. The teacher uses evidence to continuously evaluate the teacher's practice, including the effects of the teacher's choices and actions on pupils, their families, other educators, and the community. The teacher adapts the teacher's practice to meet the needs of each pupil.

10. **Leadership and collaboration**

    The teacher seeks appropriate leadership roles and opportunity in order to take responsibility for pupil learning, to collaborate with pupils, their families, educators, and the community, and to advance the profession.

# School District of Holmen

## SCHOOL BOARD OF EDUCATION MEMBERS

Jennifer Dieck, President
Chris Lau, Vice President
Maggie Smith, Clerk
Barb Wuensch, Treasurer
Bridget Todd-Robins, Board Member
Lindsay Nied, Board Member
Khadijah Islam, Board Member
Abigail Holthe, Student Representative

## ADMINISTRATION

Dr. Kristin Mueller, District Administrator
Julie Holman, Executive Director of Finance and Operations
Jill Mason, Executive Director of Student Services
Kimberly Edwards, Executive Director of Instructional Services
Kathleen Stephany, Director of Information & Technology
Lacey Sinn, Director of Learning and Assessment
Jennifer Gimmer, Director of Safety and Student Services
Wayne Sackett, High School Principal
Benjamin Johrendt, High School Associate Principal
Nick Bakke, High School Associate Principal
Jason Lulloff, Activities Director
Ryan Vogler, Middle School Principal
Ben Taschner, Middle School Associate Principal/Activities Director
Brady Turner, Middle School Associate Principal
Dr. Nick Weber, Prairie View Elementary Principal
Matt Meyers, Sand Lake Elementary Principal
Nina Swanson, Viking Elementary Principal
Sarah Thompson, Evergreen Elementary Principal
Sue Eitland, Associate Principal, 4K and Early Childhood

# CTE COMMITTEE MEMBERS

| Holmen Middle School | |
|---|---|
| Technology Education | Business Education |
| Jeff Groth | Nate Casey<br>Tiffanie Peters |

| Holmen High School | | |
|---|---|---|
| Marketing/Business Education | Family & Consumer Education | Agriscience/Technology Education |
| Heather Breske<br>Haley Hesselberg<br>Trevor Verdon<br>Cameron Carey | Danielle Bakeberg | Dan Lilla<br>Abe Regan<br>Ryan Ziegler<br>Tim Bakeberg<br>Jason Hovell<br>Jamie O'Neill |

# High School AgriScience Curriculum

**MISSION STATEMENT**

AgriScience prepares students for successful careers and a lifetime of informed choices in the agriculture, food, fiber, and natural resources systems.

**BROAD GOALS**

**Goal 1** To develop an understanding of and appreciation for career opportunities in agriculture.
**Goal 2** To develop agricultural competencies needed by individuals engaged in or preparing to engage in agriculture/agribusiness occupations.
**Goal 3** To develop the ability and skills needed to exercise and follow effective leadership in fulfilling occupational, social, and civic responsibilities.
**Goal 4** To develop human relation skills that are essential in agriculture/agribusiness occupations
**Goal 5** To develop a quality learning process through learning by doing, excellence in the classroom, laboratory examples, supervised occupational experiences, and student organizations.
**Goal 6** To develop the values and behaviors to be a steward of the environment.
**Goal 7** To develop technical skills that are essential in agriculture/agribusiness.

**COLLEGE CREDIT OPTION-TRANSCRIPTED CREDIT**

Western Technical College

College credit agreements are in place between Holmen High School and the Wisconsin Technical College System and UW system whereby a student will receive Wisconsin Technical College System credit for courses taken while in high school. There is no additional fee for these credits.

**Western Technical College Credit Opportunities for Agriscience Classes taken at HHS**

| HHS Class | Western Class and Credits Earned |
|---|---|
| Animal Science ES (TC) | Animal Science (3 credits) |
| Greenhouse 1 ES (TC) | Introductory Plant Science (3 credits) |

**Please note:** Students that earn a "C" or higher (on Western/CVTC's grading scale) AND complete all of the post secondary course competencies will earn both high school and college credit for the course. College credit earned is at no cost to the student.

# AGRISCIENCE

| Course | Pre-Req/Notes | Credit | Grade Level | | | |
|---|---|---|---|---|---|---|
| | | | 9 | 10 | 11 | 12 |
| **Level 1 (Introductory Courses)** | | | | | | |
| Ag. Mech. & Small Engines | | .5 | E | E | E | E |
| Animal Health ES | | .5 | E | E | E | E |
| Fisheries Ecology ES | Offered Even Fall | .5 | E | E | E | E |
| Greenhouse 1 ES (TC) | | .5 | E | E | E | E |
| Horse/Small Animals | | .5 | E | E | E | E |
| Landscape Design | Offered Odd Fall | .5 | E | E | E | E |
| Wildlife Ecology ES | Offered Odd Fall | .5 | E | E | E | E |
| **Level 2** | | | | | | |
| Leadership Team Building | | .5 | E | E | E | E |
| Forestry | Offered Even Fall | .5 | | E | E | E |
| **Level 3** | | | | | | |
| Animal Science ES (TC) | Yes | .5 | E | E | E | E |
| Greenhouse 2 | Yes | .5 | E | E | E | E |
| Youth Apprenticeship: Agriculture | Meet the criteria of the application | 2 | | | E | E |
| Capstone: Agriculture | Meet the criteria of the application | | | | | E |

TC = Transcripted Credit; ES = Equivalent for Science Credit; E=Elective and the year student is eligible to take the course

## Animal Health

| **Unit:** Getting Started | Duration: 5 days |
|---|---|
| **Unit Objectives:**<br><br>Students will explore careers related to animal science and analyze current events in the field while building relationships through collaborative discussions and activities in the classroom. | |
| **Priority Standards:**<br><br>● **WCRS.CAR.3:** Career Planning (PLAN) Based on what they know and have explored, develop a PLAN to reach individual education career goals.<br><br>● **WCRS.CAR.3.CS.1:** Analyze how issues, trends, technologies, and public policies impact AFNR systems. | **Learning Targets:**<br><br>● I can identify my personal strengths, interests, and skills related to careers in AFNR.<br>● I can research different career pathways within AFNR and determine the education and skills required.<br>● I can create a career plan that includes short-term and long-term goals.<br>● I can identify post-secondary education, certifications, or training needed for my career goals. |
| **Supporting Standards:**<br><br>● **CS.02:** Demonstrate employability skills for college and career readiness.<br>● **WCRS.LIF.1:** Self-awareness, management, and responsibility Gain insight into oneself to help inform and build paths to success in personal, educational, and career settings. | |

| **Unit 1:** Animal Terminology and Directional Terms | **Duration**: 10 days |
|---|---|
| **Unit Objectives:**<br><br>Students will apply correct anatomical terminology and directional terms to describe animal body structures and functions. | |

| **Priority Standards:** | **Learning Targets:** |
|---|---|
| ● **AFNR.AS.2.A:** Classify animals according to taxonomic classification systems and use.<br><br>● **AFNR.AS.1.E:** Communicate effectively utilizing disciplinary literacy. | ● I can identify and use proper anatomical terminology for various animal species.<br>● I can describe animal body directions and movements using correct directional terms.<br>● I can compare skeletal and muscular structures across species.<br>● I can assess animal conformation and explain how it affects movement and health.<br>● I can apply directional terms to diagnose and discuss animal injuries or conditions. |
| **Supporting Standards:**<br><br>● **AFNR.AS.3.A:** Communicate effectively utilizing veterinary terminology. | |

| **Unit 2:** Animal Digestion | **Duration**: 10 days |
|---|---|
| **Unit Objective:**<br><br>Students will compare digestive systems of different animals and analyze the breakdown and absorption of nutrients. | |
| **Priority Standards**<br><br>● **AFNR.AS.2.B:** Apply principles of comparative anatomy and physiology to uses within various animal systems.<br><br>● **AFNR.AS.3.B:** Demonstrate and/or recommend animal handling procedures to prevent hazards and increase safety of humans and animals. | **Learning Targets:**<br><br>● I can identify and explain the differences between monogastric, ruminant, avian, and hindgut digestion.<br>● I can describe the function of key digestive organs in different species.<br>● I can analyze how feed is broken down and absorbed in different animal systems.<br>● I can evaluate digestive health and |

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| | common disorders in animals.<br>● I can explain how diet influences digestion and overall animal health. |
| **Supporting Standards:**<br><br>● **AFNR.AS.4.A:** Analyze nutritional needs of animals. | |

| **Unit 3:** Animal Nutrition | **Duration**: 10 days |
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| **Unit Objectives (overarching objectives):**<br><br>Students will calculate rations, learn what nutrients are needed to support animal health and create a pet treat. | |
| **Priority Standards:**<br><br>● **AFNR.AS.4.A:** Analyze nutritional needs of animals.<br>● **AFNR.AS.3.C:** Design programs to prevent animal diseases, parasites and other disorders to ensure animal welfare. | **Learning Targets:**<br><br>● I can classify nutrients and explain their role in animal health and performance.<br>● I can analyze different feed types and their nutritional benefits.<br>● I can formulate balanced rations for livestock, companion animals, and exotic species.<br>● I can assess the impact of deficiencies and excesses in animal diets.<br>● I can compare commercial feed labels and evaluate their nutritional quality. |
| **Supporting Standards:**<br><br>● **AFNR.AS.4.B:** Analyze feed rations and assess if they meet nutritional needs of animals. | |

| **Unit 4:** Disease and First Aid | **Duration**: 10 days |
|---|---|
| **Unit Objectives:**<br><br>Students will identify signs of common diseases, understand prevention strategies, and apply basic first aid techniques for animals. | |
| **Priority Standards:**<br><br>● **AFNR.AS.3.A:** Communicate effectively utilizing veterinary terminology.<br>● **AFNR.AS.3.C:** Design programs to prevent animal diseases, parasites and other disorders to ensure animal welfare. | **Learning Targets:**<br><br>● I can recognize symptoms of common diseases in livestock and companion animals.<br>● I can explain how diseases are transmitted and ways to prevent them.<br>● I can develop and implement biosecurity measures to protect animal health.<br>● I can perform basic first aid procedures for animals in emergency situations.<br>● I can evaluate treatment options and understand when veterinary intervention is necessary. |
| **Supporting Standards:**<br><br>● **AFNR.AS.3.E:** Analyze biosecurity measures utilized to protect welfare of humans and animals on a local, state, national, and global level. | |

## Fisheries Ecology

| **Unit:** Getting Started | **Duration**: 5 days |
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| **Unit Objective (overarching objectives):**<br><br>Students will explore careers related to fisheries ecology and analyze current events in the field while building relationships through collaborative discussions and activities in the classroom. | |

| **Priority Standards:** | **Learning Targets ("I Can" Statements):** |
|---|---|
| ● **WCRS.CAR.3:** Career Planning (PLAN) Based on what they know and have explored, develop a PLAN to reach individual education career goals.<br><br>● **WCRS.CAR.3.CS.1:** Analyze how issues, trends, technologies, and public policies impact AFNR systems. | ● I can identify my personal strengths, interests, and skills related to careers in AFNR.<br>● I can research different career pathways within AFNR and determine the education and skills required.<br>● I can create a career plan that includes short-term and long-term goals.<br>● I can identify post-secondary education, certifications, or training needed for my career goals. |
| **Supporting Standards:**<br><br>● **CS.02:** Demonstrate employability skills for college and career readiness.<br>● **WCRS.LIF.1:** Self-awareness, management, and responsibility Gain insight into oneself to help inform and build paths to success in personal, educational, and career settings. | |

| **Unit 1:** Fish Anatomy - Internal and External | **Duration**: 10 days |
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| **Unit Objective:**<br><br>Students will analyze the internal and external anatomical structures of fish, identifying their functions and adaptations to aquatic environments. | |
| **Priority Standards:**<br><br>● **AFNR.AS.2.A:** Classify animals according to taxonomic classification systems and use.<br><br>● **AFNR.AS.2:** Students will classify, evaluate, select and manage animals based on anatomical and physiological characteristics. | **Learning Targets:**<br><br>● I can identify and describe the major internal and external anatomical features of fish.<br>● I can explain how the anatomy of fish supports their respiration, digestion, and reproduction in aquatic ecosystems. |

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| • **AFNR.AS.2.B:** Apply principles of comparative anatomy and physiology to uses within various animal systems. | |
| **Supporting Standards:**<br><br>• **AFNR.AS.1.3:** Understand how anatomical structures and systems function in animals. | |

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| **Unit 2:** Fish Species Identification | **Duration**: 10 days |
| **Unit Objective:**<br><br>Students will identify common fish species using morphological characteristics, habitat preferences, and ecological roles. | |
| **Priority Standards:**<br><br>• **AFNR.ENR.7.A:** Identify mammals, birds, fish, reptiles, and other species common to Wisconsin.<br><br>• **AFNR.ENR.8.A:** Determine tenants of sound agricultural stewardship to produce agronomic crops and livestock.<br><br>• **AFNR.ENR.7.B:** Use scientific principles to estimate and manage wildlife populations. | **Learning Targets:**<br><br>• can identify and classify various fish species based on their morphological characteristics.<br><br>• I can explain how fish species vary in behavior, diet, and habitat preferences. |
| **Supporting Standards:**<br><br>• **AFNR.ENR.7.C:** Manage land to improve wildlife habitats. | |

<table>
<tr><td>Unit 3: Fish Management</td><td>Duration: 10 days</td></tr>
<tr><td colspan="2">Unit Objective (overarching objectives):<br><br>Students will evaluate fisheries management techniques used to maintain sustainable fish populations and aquatic ecosystems.</td></tr>
<tr><td>Priority Standards:<br><br>● AFNR.ENR.5.D: Protect and improve surface water quality.<br><br>● AFNR.ENR.5.E: Apply best management practices to protect and improve wetland management based on classification and function.<br><br>● AFNR.ENR.7.D: Grow game fish in an aquaculture system.</td><td>Learning Targets:<br><br>● I can describe best practices in fish management, including population control, stocking, and monitoring.<br>● I can identify threats to fish populations and the management strategies used to address them.<br>● I can apply different management techniques to preserve and enhance aquatic ecosystems.</td></tr>
<tr><td colspan="2">Supporting Standards:<br><br>● ARNR.ENR.5.C: Define and describe water purification and wastewater treatment practices.</td></tr>
</table>

<table>
<tr><td>Unit 4: Water Quality and Habitat Management</td><td>Duration: 10 days</td></tr>
<tr><td colspan="2">Unit Objective:<br><br>Students will analyze water quality parameters and their impact on aquatic life, developing skills in monitoring and managing water systems to support healthy fish populations.</td></tr>
<tr><td>Priority Standards:<br><br>● AFNR.ENR.1: Examine components, applications, historical development, global implications, future trends, and career opportunities of environmental</td><td>Learning Targets:<br><br>● I can identify common aquatic plants and animals and explain their roles in aquatic ecosystems.<br>● I can analyze how changes in plant</td></tr>
</table>

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| and natural resources pathways.<br><br>● **AFNR.ENR.2:** Apply ecological concepts to natural resources management and service systems. | and animal populations affect water quality and overall ecosystem health. |
| **Supporting Standards:**<br><br>● **AFNR.ENR.7.A:** Identify mammals, birds, fish, reptiles, and other species common to Wisconsin. | |

## Greenhouse

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| **Unit:** Getting Started | **Duration**: 5 days |
| **Unit Objective:**<br><br>Students will explore careers related to greenhouse and analyze current events in the field while building relationships through collaborative discussions and activities in the classroom. | |
| **Priority Standards:**<br><br>● **WCRS.CAR.3:** Career Planning (PLAN) Based on what they know and have explored, develop a PLAN to reach individual education career goals.<br><br>● **WCRS.CAR.3.CS.1:** Analyze how issues, trends, technologies, and public policies impact AFNR systems. | **Learning Targets:**<br><br>● I can identify my personal strengths, interests, and skills related to careers in AFNR.<br>● I can research different career pathways within AFNR and determine the education and skills required.<br>● I can create a career plan that includes short-term and long-term goals.<br>● I can identify post-secondary education, certifications, or training needed for my career goals. |
| **Supporting Standards:** | |

- **CS.02:** Demonstrate employability skills for college and career readiness.
- **WCRS.LIF.1:** Self-awareness, management, and responsibility Gain insight into oneself to help inform and build paths to success in personal, educational, and career settings.

| **Unit 1:** Plant Anatomy, Seed Germination, and Plant Reproduction | **Duration**: 10 days |
|---|---|
| **Unit Objective:**<br><br>Students will analyze plant structures, seed germination processes, and reproductive strategies to understand how plants develop, reproduce, and adapt to their environments. | |
| **Priority Standards:**<br><br>● **AFNR.PS.2.B:** Apply knowledge of plant anatomy and functions of plant structures to activities associated with plant systems.<br><br>● **AFNR.PS.4.A:** Demonstrate plant propagation techniques. | **Learning Targets:**<br><br>● I can identify and describe the major structures of plants, including roots, stems, leaves, flowers, and seeds.<br>● I can explain the process of seed germination and the factors that influence successful plant growth.<br>● I can compare and contrast sexual and asexual plant reproduction methods.<br>● I can analyze the role of pollination and fertilization in plant reproduction.<br>● I can demonstrate proper propagation techniques, including seed starting and vegetative propagation. |
| **Supporting Standards:**<br><br>● **AFNR.BI.2:** Examine the genetic and environmental factors influencing plant growth and reproduction. | |

| **Unit 2:** Soil, Growing Media and Nutrients | **Duration**: 10 days |
|---|---|
| **Unit Objective:**<br><br>Students will evaluate soil composition, growing media, and nutrient and water uptake to determine optimal plant growth conditions. | |
| **Priority Standards:**<br><br>● **AFNR.ENR.4.A:** Examine soil characteristics.<br>● **AFNR.ENR.4.C:** Research rangeland management. | **Learning Targets:**<br><br>● I can compare different soil types and growing media to determine their suitability for plant growth.<br>● I can identify essential plant nutrients and explain how nutrient deficiencies affect plant health.<br>● I can describe how plants absorb and transport water and nutrients through their roots and vascular system.<br>● I can analyze the impact of soil pH, texture, and composition on plant growth and nutrient availability.<br>● I can evaluate irrigation techniques and their effectiveness in maintaining plant health. |
| **Supporting Standards:**<br><br>● **AFNR.PS.3.B:** Prepare growing media for use in plant systems. sustainable agriculture. | |

| **Unit 3:** Plant Growth | **Duration**: 10 days |
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| **Unit Objectives (overarching objectives):**<br><br>Students will analyze the biological and environmental factors that influence plant growth, evaluating techniques to optimize plant health and productivity. | |
| **Priority Standards:** | **Learning Targets:** |

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| • AFNR.PS.3.A: Determine influence of environmental factors on plant growth.<br><br>• AFNR.PS.3.C: Develop and implement a fertilization plan for specific plants in various production systems. | • I can explain how light, temperature, water, and nutrients influence plant growth and development.<br>• I can analyze how plant genetics contribute to traits such as drought tolerance and disease resistance.<br>• I can evaluate management practices, such as fertilization and pruning, to optimize plant health.<br>• I can assess the effects of biotic and abiotic stressors on plant growth and productivity.<br>• I can apply scientific methods to measure and monitor plant growth under different conditions. |
| **Supporting Standards:**<br><br>• AFNR.ENR.4.B: Identify soil erosion and impacts to environmental and natural resources systems. | |

| **Unit 4:** Running a School Greenhouse | **Duration**: 10 days |
|---|---|
| **Unit Objectives:**<br><br>Students will develop skills in greenhouse management, including plant production, resource management, and business operations, to ensure an efficient and sustainable growing environment. | |
| **Priority Standards:**<br><br>• **AFNR.PS.5.C:** Manage a plant production system.<br><br>• **AFNR.PS.4.E:** Harvest, handle and store crops. | **Learning Targets:**<br><br>• I can manage the daily operations of a greenhouse, including watering, temperature control, and pest management.<br>• I can select appropriate plant species and growing techniques for greenhouse production.<br>• I can apply business and marketing strategies to promote and sell |

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| | greenhouse products.<br>● I can implement sustainable practices such as composting, integrated pest management, and water conservation.<br>● I can analyze greenhouse data to make informed decisions about plant production and resource use. |
| **Supporting Standards:**<br><br>● **AFNR.PS.5.A:** Investigate various means to grow plants. | |

## Horse and Small Animals

| **Unit 1:** Terms and Anatomy | **Duration**: 12 days |
|---|---|
| **Unit Objective:**<br><br>Students will classify animals, use industry terminology, and understand anatomy and reproduction processes to apply in real-world animal science contexts. | |
| **Priority Standards:**<br><br>● **AFNR.AS.2.A:** Classify animals according to taxonomic classification systems and use.<br><br>● **AFNR.AS.2.B:** Apply principles of comparative anatomy and physiology to uses within various animal systems.<br><br>● **AFNR.AS.5.B:** Evaluate animals for breeding readiness and soundness. | **Learning Targets:**<br><br>● I can identify and classify animals using anatomical features and industry terminology.<br>● I can describe how animal anatomy impacts health, reproduction, and industry practices.<br>● I can compare and contrast breeding methods used for horses and small animals.<br>● I can accurately use animal industry terms related to anatomy and reproduction. |
| **Supporting Standards:**<br><br>● **AFNR.AS.5.C:** Apply scientific principles in selection and breeding of animals. | |

| **Unit 2:** Equine Science | **Duration**: 10 days |
|---|---|
| **Unit Objective:**<br><br>Students will identify equine breeds, evaluate management practices, and demonstrate knowledge of equine equipment, markings, and industry competitions. | |
| **Priority Standards:**<br><br>● **AFNR.AS.2.C:** Select and/or train animals for specific purposes and maximum performance based on anatomy and physiology.<br><br>● **AFNR.AS.7.A:** Design animal housing, equipment, and handling facilities for animals.<br><br>● **AFNR.AS.6.A:** Demonstrate management techniques ensuring animal welfare. | **Learning Targets ("I Can" Statements):**<br><br>● I can identify and describe major equine breeds and their industry uses.<br>● I can apply best management practices for horse care, including feeding and grooming.<br>● I can recognize and explain horse markings used for identification.<br>● I can describe different equine competitions and their role in the industry.<br>● I can identify and correctly use equine equipment, including saddles and tack. |
| **Supporting Standards:**<br><br>● **FNR.AS.9:** Evaluate the impact of environmental conditions on animal health. | |

| **Unit 3:** Small Animal Science and Evaluation | **Duration**: 10 days |
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| **Unit Objective:**<br><br>Students will explore small animal species, analyze responsibilities of ownership, and evaluate animals based on established industry standards. | |
| **Priority Standards:**<br><br>● **AFNR.AS.2.A:** Classify animals | **Learning Targets ("I Can" Statements):**<br><br>● I can identify common small animal |

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| according to taxonomic classification systems and use.<br><br>● **AFNR.AS.3.B:** Demonstrate and/or recommend animal handling procedures to prevent hazards and increase safety of humans and animals.<br><br>● **AFNR.AS.3.D:** Recommend and demonstrate an animal health record-keeping system. | species and breeds and their uses.<br>● I can explain the responsibilities and best practices of small animal ownership.<br>● I can evaluate small animals using established industry criteria.<br>● I can analyze the economic and social contributions of the small animal industry. |
| **Supporting Standards:**<br><br>● **AFNR.AS.3.E**: Analyze biosecurity measures utilized to protect the welfare of humans and animals on a local, state, national, and global level.<br>● **AFNR.AS.1.B:** Analyze and apply laws and sustainable practices to animal agriculture from a global perspective. | |

| **Unit 4:** Animal Management and Handling | **Duration**: 13 days |
|---|---|
| **Unit Objective:**<br><br>Students will demonstrate safe animal handling practices, analyze animal behavior, and apply management techniques to ensure animal health and welfare. | |
| **Priority Standards:**<br><br>● **AFNR.AS.6.A:** Demonstrate management techniques ensuring animal welfare.<br><br>● **AFNR.AS.3.B:** Demonstrate and/or recommend animal handling procedures to prevent hazards and increase safety of humans and animals.<br><br>● **AFNR.AS.7.A:** Design animal | **Learning Targets ("I Can" Statements):**<br><br>● I can demonstrate safe and effective animal handling techniques.<br>● I can analyze animal behavior to improve handling and management.<br>● I can apply best practices for animal health and welfare.<br>● I can identify and correctly use animal management equipment. |

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| housing, equipment, and handling facilities for animals. | |
| **Supporting Standards:**<br><br>● **AFNR.AS.3.C:** Design programs to prevent animal diseases, parasites, and other disorders to ensure animal welfare.<br>● **AFNR.AS.8.A:** Reduce effects of animal production on the environment. | |

## Landscape Design

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| **Unit:** Getting Started | **Duration**: 5 days |
| **Unit Objective:**<br><br>Students will explore careers related to landscape design and analyze current events in the field while building relationships through collaborative discussions and activities in the classroom. | |
| **Priority Standards:**<br><br>● **WCRS.CAR.3:** Career Planning (PLAN) Based on what they know and have explored, develop a PLAN to reach individual education career goals.<br><br>● **WCRS.CAR.3.CS.1:** Analyze how issues, trends, technologies, and public policies impact AFNR systems.<br><br>● **AFNR.PS.5.4:** Explore career opportunities in landscape and environmental design. | **Learning Targets:**<br><br>● I can identify my personal strengths, interests, and skills related to careers in AFNR.<br>● I can research different career pathways within AFNR and determine the education and skills required.<br>● I can create a career plan that includes short-term and long-term goals.<br>● I can identify post-secondary education, certifications, or training needed for my career goals. |
| **Supporting Standards:** | |

- **CS.02:** Demonstrate employability skills for college and career readiness.
- **WCRS.LIF.1:** Self-awareness, management, and responsibility Gain insight into oneself to help inform and build paths to success in personal, educational, and career settings.

| **Unit 1:** Drawing Instruments & Principles of Design | **Duration**: 10 days |
|---|---|
| **Unit Objective:**<br><br>Students will use professional drawing tools and apply the principles of design to create landscape plans. | |
| **Priority Standards:**<br><br>● **AFNR.PS.6.A:** Create landscape designs using plants.<br><br>● **AFNR.PSMT.5.B:** Create sketches and plans for AFNR structures.<br><br>● **AFNR.PS.6.A:** Apply design principles to landscape design. | **Learning Targets:**<br><br>● I can identify and properly use drawing instruments for landscape design.<br>● I can explain and apply the principles of landscape design (balance, unity, proportion, etc.).<br>● I can create scale drawings and render basic landscape concepts.<br>● I can evaluate different landscape designs for effectiveness and visual appeal.<br>● I can revise and refine landscape drawings based on feedback and site needs. |
| **Supporting Standards:**<br><br>● **AFNR.PS.03.D:** Assess the use of floriculture and landscape design techniques in creating environments.<br>● **AFNR.PS.6.A.b:** Discuss applications of art in agriculture/horticulture. | |

| **Unit 2:** Landscape Plant Identification & Installation | **Duration**: 10 days |
|---|---|
| **Unit Objective:**<br><br>Students will identify common landscape plants and demonstrate proper installation techniques. | |
| **Priority Standards:**<br><br>● **AFNR.PS.1.A:** Describe sectors of the plant systems career pathway.<br><br>● **AFNR.PS.4.A:** Demonstrate plant propagation techniques.<br><br>● **AFNR.PS.4.B:** Develop and implement a plant management plan for crop production. | **Learning Targets:**<br><br>● I can identify common landscape plants by leaf, bark, and growth habits.<br>● I can describe plant hardiness zones and select appropriate plants for a given site.<br>● I can demonstrate proper planting techniques for trees, shrubs, and flowers.<br>● I can analyze soil conditions and environmental factors that affect plant health.<br>● I can create a planting plan that incorporates site conditions and design goals. |
| **Supporting Standards:**<br><br>● **AFNR.PS.2.A:** Classify agricultural plants according to taxonomy systems. | |

| **Unit 3:** Food Forests, Native Plants & Floral Design | **Duration**: 10 days |
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| **Unit Objective (overarching objectives):**<br><br>Students will explore sustainable landscaping through food forests and native plants while applying floral design techniques. | |
| **Priority Standards:** | **Learning Targets:** |

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| • **AFNR.PS.4.D:** Apply principles and practices of sustainable agriculture to plant production.<br>• **AFNR.PS.6.B:** Create floral and other non-landscape designs using plants.<br>• **AFNR.PS.1.E:** Describe sustainability practices in plant systems. | • I can explain the benefits of food forests and native plant landscapes.<br>• I can design a sustainable landscape that incorporates native species.<br>• I can identify common native plants and their role in the ecosystem.<br>• I can apply the elements of floral design to create arrangements.<br>• I can evaluate sustainable landscaping practices for different environments. |
| **Supporting Standards:**<br>• **AFNR.PS.4.C:** Develop and implement a plan for integrated pest management (IPM). | |

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| **Unit 4:** Graphic Design & Advanced Landscape Design | **Duration**: 10 days |
| **Unit Objective:**<br>Students will use graphic design techniques to create professional-quality landscape plans and proposals. | |
| **Priority Standards:**<br>• **AFNR.PSMT.5.B:** Create sketches and plans for AFNR structures.<br>• **AFNR.PS.6.A:** Apply design principles to enhance the aesthetics and functionality of landscapes.<br>• **AFNR.FCP.1:** Examine the components, applications, historical development, global implications, future trends, and career opportunities in food chemistry, products, and processing. | **Learning Targets:**<br>• I can use graphic design software to create digital landscape renderings.<br>• I can develop a complete landscape proposal, including site analysis and cost estimates.<br>• I can present and defend my landscape designs in a professional setting.<br>• I can revise designs based on client feedback and project goals.<br>• I can integrate sustainability and functionality into my landscape plans. |

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| **Supporting Standards:**<br><br>● **AFNR.PSMT.4.E:** Utilize tractors, machinery, and implements. |

## Wildlife Ecology

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| **Unit:** Getting Started | **Duration**: 5 days |
| **Unit Objectives:**<br><br>Students will explore careers related to wildlife ecology and analyze current events in the field while building relationships through collaborative discussions and activities in the classroom. | |
| **Priority Standards:**<br><br>● **WCRS.CAR.3**: Career Planning (PLAN) Based on what they know and have explored, develop a PLAN to reach individual education career goals.<br><br>● **WCRS.CAR.3.CS.1:** Analyze how issues, trends, technologies, and public policies impact AFNR systems.<br><br>● **AFNR.PSMT.8.B:** Examine and choose career opportunities matched to personal skills, talents, and career goals in AFNR pathway of interest. | **Learning Targets:**<br><br>● I can identify my personal strengths, interests, and skills related to careers in AFNR.<br>● I can research different career pathways within AFNR and determine the education and skills required.<br>● I can create a career plan that includes short-term and long-term goals.<br>● I can identify post-secondary education, certifications, or training needed for my career goals. |
| **Supporting Standards:**<br><br>● **CS.02:** Demonstrate employability skills for college and career readiness.<br>● **WCRS.LIF.1:** Self-awareness, management, and responsibility Gain insight into oneself to help inform and build paths to success in personal, educational, and career settings. | |

| **Unit 1:** Identification and Tracks | **Duration**: 10 days |
|---|---|
| **Unit Objectives:**<br><br>Students will identify common wildlife species using physical characteristics, behavior, and track patterns while analyzing how animal adaptations aid in survival. | |
| **Priority Standards:**<br><br>● **AFNR.ENR.7.A:** Identify mammals, birds, fish, reptiles, and other species common to Wisconsin.<br><br>● **AFNR.ENR.7.B:** Use scientific principles to estimate and manage wildlife populations. | **Learning Targets:**<br><br>● I can identify Wisconsin wildlife species based on physical features and habitat preferences.<br>● I can interpret animal tracks and other signs to determine species presence and movement patterns.<br>● I can analyze how different species have adapted to their environments for survival.<br>● I can use field guides and dichotomous keys to classify wildlife species accurately.<br>● I can compare the tracking patterns of different animal groups, including mammals, birds, and amphibians. |
| **Supporting Standards:**<br><br>● **AFNR.ENR.7.C:** Manage land to improve wildlife habitat. | |

| **Unit 2:** The Whole Picture – History & Ecosystems | **Duration**: 10 days |
|---|---|
| **Unit Objective:**<br><br>Students will examine historical wildlife conservation efforts and analyze the structure and function of ecosystems to understand the interdependence of species and environmental factors. | |
| **Priority Standards:** | **Learning Targets:** |

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| • **AFNR.ENR.1.A:** Evaluate historical conservation practices and their impact on wildlife populations.<br>• **AFNR.ENR.4.A:** Analyze how ecosystems function and the relationships between biotic and abiotic factors.<br>• **AFNR.ENR.4.C:** Explain how energy flows and nutrients cycle through ecosystems. | • I can explain how historical conservation efforts have shaped modern wildlife management.<br>• I can analyze how biotic and abiotic factors interact within an ecosystem.<br>• I can evaluate how human activities impact wildlife populations and habitats.<br>• I can describe how food chains, food webs, and energy flow impact wildlife populations.<br>• I can assess the importance of biodiversity in maintaining ecosystem health. |
| **Supporting Standards:**<br>• **AFNR.NRS.6. A:** Investigate the role of sustainable land management practices in ecosystem conservation. | |

| **Unit 3:** Deer | **Duration**: 10 days |
|---|---|
| **Unit Objective (overarching objectives):**<br>Students will examine deer biology, behavior, population dynamics, and management strategies to understand their role in ecosystems and human-wildlife interactions. | |
| **Priority Standards:**<br>• **AFNR.ENR.7.A** - Identify mammals, birds, fish, reptiles, and other species common to Wisconsin.<br>• **AFNR.ENR.7.B** - Use scientific principles to estimate and manage wildlife populations.<br>• **AFNR.ENR.7.C** - Manage land to improve wildlife habitat. | **Learning Targets:**<br>• I can identify physical characteristics and behaviors of deer that help them survive in Wisconsin ecosystems.<br>• I can explain how deer populations are monitored and estimated using scientific methods.<br>• I can analyze the effects of overpopulation or underpopulation of |

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| | deer on ecosystems and human activities.<br><br>● I can evaluate different management strategies (e.g., hunting, habitat improvement, population control) for maintaining healthy deer populations.<br><br>● I can propose ways land management practices can be used to improve deer habitat and support overall biodiversity. |
| **Supporting Standards:**<br><br>● **AFNR.NRS.6.A:** Assess the impact of land use changes on wildlife populations and migration patterns. | |

| **Unit 4:** Waterfowl | **Duration**: 10 days |
|---|---|
| **Unit Objectives:**<br><br>Students will explore the biology, migration patterns, and habitat needs of waterfowl species while analyzing conservation efforts and management strategies. | |
| **Priority Standards:**<br><br>● **AFNR.ENR.7.A:** Identify mammals, birds, fish, reptiles, and other species common to Wisconsin.<br><br>● **AFNR.ENR.2.B:** Identify and classify waterfowl species based on physical characteristics and habitat requirements.<br><br>● **AFNR.ENR.5.B:** Determine priorities in sustainable water use planning. | **Learning Targets ("I Can" Statements):**<br><br>● I can identify common waterfowl species by physical characteristics, calls, and behaviors.<br>● I can explain how migration patterns impact waterfowl populations and conservation efforts.<br>● I can assess how wetland ecosystems support waterfowl survival and reproduction.<br>● I can analyze the role of organizations such as Ducks Unlimited in waterfowl conservation.<br>● I can evaluate the impact of hunting |

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| | regulations on waterfowl population management. |
| **Supporting Standards:**<br><br>● **AFNR.ENR.7.C:** Manage land to improve wildlife habitat. | |

## Leadership

| **Unit:** Getting Started | **Duration**: 5 days |
|---|---|
| **Unit Objectives:**<br><br>Students will explore careers related to leadership and analyze current events in the field while building relationships through collaborative discussions and activities in the classroom. | |
| **Priority Standards:**<br><br>● **WCRS.CAR.3:** Career Planning (PLAN) Based on what they know and have explored, develop a PLAN to reach individual education career goals.<br><br>● **WCRS.CAR.3.CS.1:** Analyze how issues, trends, technologies, and public policies impact AFNR systems. | **Learning Targets:**<br><br>● I can identify my personal strengths, interests, and skills related to careers in AFNR.<br>● I can research different career pathways within AFNR and determine the education and skills required.<br>● I can create a career plan that includes short-term and long-term goals.<br>● I can identify post-secondary education, certifications, or training needed for my career goals. |
| **Supporting Standards:**<br><br>● **CS.02:** Demonstrate employability skills for college and career readiness.<br>● **WCRS.LIF.1:** Self-awareness, management, and responsibility Gain insight into oneself to help inform and build paths to success in personal, educational, and career settings. | |

| **Unit 1:** Understanding Yourself as a Leader | **Duration**: 10 days |
|---|---|
| **Unit Objectives:**<br><br>Students will explore their personal leadership style, strengths, and areas for growth while developing self-awareness and goal-setting strategies. | |
| **Priority Standards:**<br><br>● **AFNR.ALLR.1.D:** Identify and understand connections between academic subjects and agricultural careers including, but not limited to STEM.<br><br>● **AFNR.ALLR.1.E:** Understand and communicate the importance and value of agriculture in daily life.<br><br>● **AFNR.ALLR.2.A:** Implement leadership and group dynamic skills. | **Learning Targets:**<br><br>● I can identify my leadership style and explain how it influences my decisions.<br>● I can analyze my personal strengths and areas for growth as a leader.<br>● I can develop goals that align with my leadership vision and personal values.<br>● I can recognize how emotional intelligence affects leadership effectiveness.<br>● I can apply self-reflection techniques to improve my leadership skills. |
| **Supporting Standards:**<br><br>● **AFNR.ALLR.4.A:** Act as a responsible and contributing member of intra-curricular groups, professional organizations, and community groups. | |

| **Unit 2:** Key Leadership Qualities | **Duration**: 10 days |
|---|---|
| **Unit Objective:**<br><br>Students will examine essential leadership traits, analyze successful leaders, and develop their ability to lead with integrity, confidence, and adaptability. | |
| **Priority Standards:**<br><br>● **AFNR.ALLR.3.A:** Select and implement reliable research | **Learning Targets:**<br><br>● I can describe the key qualities of effective leaders and how they impact |

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| processes and methods to generate data for decision-making in AFNR.<br><br>● **AFNR.ALLR.2.C:** Apply managerial leadership skills.<br><br>● **AFNR.ALLR.2.F:** Speak using strategies ensuring clarity, logic, purpose, and professionalism. | group success.<br>● I can evaluate real-world leaders and identify the traits that contributed to their effectiveness.<br>● I can demonstrate adaptability when solving leadership challenges.<br>● I can assess my ability to lead with confidence, integrity, and responsibility.<br>● I can apply leadership qualities in different scenarios to enhance team performance. |
| **Supporting Standards:**<br><br>● **AFNR.ALLR.2.H:** Produce clear, reasoned and coherent written and visual communication. | |

| **Unit 3:** Effective Communication | **Duration**: 10 days |
|---|---|
| **Unit Objective (overarching objectives):**<br><br>Students will develop communication skills necessary for leadership, including verbal and nonverbal communication, active listening, and conflict resolution. | |
| **Priority Standards:**<br><br>● **AFNR.ALLR.2.F:** Speak using strategies ensuring clarity, logic, purpose, and professionalism.<br><br>● **AFNR.ALLR.2.G:** Model active listening strategies when interacting with others.<br><br>● **AFNR.ALLR.4.B**: Work productively in teams, groups, clubs, and/or organizations | **Learning Targets ("I Can" Statements):**<br><br>● I can use effective verbal and nonverbal communication to convey my message as a leader.<br>● I can demonstrate active listening techniques to improve collaboration and understanding.<br>● I can apply conflict resolution strategies to promote positive team dynamics.<br>● I can analyze different communication styles and adapt my approach to different audiences.<br>● I can assess the role of emotional |

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| | intelligence in effective leadership communication. |
| **Supporting Standards:**<br><br>● **AFNR.ALLR.3.B:** Evaluate the validity of sources and data used in decision making. | |

| **Unit 4:** Leading Individuals and Teams | **Duration**: 10 days |
|---|---|
| **Unit Objective:**<br><br>Students will apply leadership principles to lead individuals and teams effectively, develop decision-making strategies, and foster collaboration. | |
| **Priority Standards:**<br><br>● **AFNR.ALLR.3.B:** Evaluate the validity of sources and data used in decision making.<br><br>● **AFNR.ALLR.4.A:** Act as a responsible and contributing member of intra-curricular groups, professional organizations, and community groups.<br><br>● **AFNR.ALLR.5.B:** Examine and choose career opportunities matched to personal skills, talents, and career goals in AFNR pathway of interest. | **Learning Targets:**<br><br>● I can identify different team roles and explain how they contribute to group success.<br>● I can apply leadership strategies to manage and motivate a team effectively.<br>● I can make informed decisions that positively impact a group or organization.<br>● I can recognize how diversity and inclusion strengthen team performance.<br>● I can assess my ability to lead others through real-world leadership experiences. |
| **Supporting Standards:**<br><br>● **AFNR.ALLR.4.C:** Create and implement strategies to engage team members to work toward goals in teams, groups, clubs, and/or organizations. | |

## Forestry

| **Unit:** Getting Started | **Duration**: 5 days |
|---|---|
| **Unit Objective:**<br><br>Students will explore careers related to forestry and analyze current events in the field while building relationships through collaborative discussions and activities in the classroom. | |
| **Priority Standards:**<br><br>● **WCRS.CAR.3:** Career Planning (PLAN) Based on what they know and have explored, develop a PLAN to reach individual education career goals.<br><br>● **WCRS.CAR.3.CS.1:** Analyze how issues, trends, technologies, and public policies impact AFNR systems. | **Learning Targets:**<br><br>● I can identify my personal strengths, interests, and skills related to careers in AFNR.<br>● I can research different career pathways within AFNR and determine the education and skills required.<br>● I can create a career plan that includes short-term and long-term goals.<br>● I can identify post-secondary education, certifications, or training needed for my career goals. |
| **Supporting Standards:**<br><br>● **CS.02:** Demonstrate employability skills for college and career readiness.<br>● **WCRS.LIF.1:** Self-awareness, management, and responsibility Gain insight into oneself to help inform and build paths to success in personal, educational, and career settings. | |

| **Unit 1:** Introduction to Forest History, Ecology, and Biomes | **Duration**: 10 days |
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| **Unit Objective:**<br><br>Students will explore the history and ecological significance of forests, analyze different forest biomes, and develop skills in tree identification. | |

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| **Priority Standards:**<br><br>● **AFNR.ENR.1.A:** Evaluate historical forest management practices and their impact on modern forestry.<br><br>● **AFNR.ENR.1.B:** Analyze the ecological functions of different forest types and their roles in global ecosystems.<br><br>● **AFNR.ENR.1.C:** Identify and classify trees based on physical characteristics and habitat. | **Learning Targets:**<br><br>● I can explain key historical events that shaped forest management and conservation.<br>● I can describe the ecological roles of forests in different biomes, including temperate, tropical, and boreal forests.<br>● I can identify trees using characteristics such as leaves, bark, and seeds.<br>● I can analyze how forests contribute to biodiversity and climate regulation.<br>● I can create a visual timeline of major forest management milestones. |
| **Supporting Standards:**<br><br>● **AFNR.ENR.1.D:** Assess the role of forests in maintaining ecological balance. | |

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| **Unit 2:** Soil Science, Forest Health, and Resource Management | **Duration**: 10 days |
| **Unit Objective:**<br><br>Students will examine soil composition, forest health indicators, and management practices for sustainable forestry. | |
| **Priority Standards:**<br><br>● **AFNR.ENR.2.A:** Investigate soil properties and their influence on forest ecosystems.<br><br>● **AFNR.ENR.2.B:** Evaluate forest management techniques to maintain forest health and sustainability. | **Learning Targets:**<br><br>● I can analyze different soil types and explain their impact on forest growth.<br>● I can identify common forest pests and diseases and evaluate their effects on tree health.<br>● I can assess sustainable forestry practices that promote forest |

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| • **AFNR.ENR.2.C:** Assess the impact of pests, diseases, and environmental factors on forest ecosystems. | conservation.<br>• I can conduct a soil analysis to determine forest health indicators.<br>• I can describe how legal and ethical forestry practices impact forest management. |
| **Supporting Standards:**<br>• **AFNR.ENR.2.D:** Examine the impact of land use on soil health and forest sustainability. | |

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| **Unit 3:** Traditional and Modern Uses of Forest Resources | **Duration**: 10 days |
| **Unit Objective (overarching objectives):**<br>Students will explore the historical and modern uses of forests, comparing traditional practices with contemporary applications in industry, recreation, and medicine. | |
| **Priority Standards:**<br>• **AFNR.ENR.3.A:** Analyze the historical significance of forest resources in human civilization.<br>• **AFNR.ENR.3.B:** Investigate sustainable resource extraction methods and their environmental impact.<br>• **AFNR.ENR.3.C:** Compare traditional forestry practices with modern technological advancements. | **Learning Targets:**<br>• I can describe traditional uses of forest resources by indigenous cultures and early settlers.<br>• I can compare historical forestry tools and techniques with modern technologies.<br>• I can evaluate the role of forests in medicine, industry, and recreation today.<br>• I can analyze the impact of forestry laws and regulations on resource use.<br>• I can apply traditional woodworking techniques to create a functional forest tool. |
| **Supporting Standards:** | |

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| ● **AFNR.ENR.3.D:** Analyze how forest products contribute to local and global economies. |

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|---|---|
| **Unit 4:** Forest Restoration, Reforestation, and Conservation | **Duration**: 10 days |
| **Unit Objective:**<br><br>Students will develop an understanding of conservation techniques, reforestation strategies, and sustainable forest management practices to preserve forest ecosystems. | |
| **Priority Standards:**<br><br>● **AFNR.ENR.4.A:** Analyze reforestation and restoration strategies for degraded forest ecosystems.<br><br>● **AFNR.ENR.4.B:** Investigate the role of conservation in maintaining forest biodiversity and ecosystem services.<br><br>● **AFNR.ENR.4.C:** Develop forest management plans that incorporate sustainability and conservation principles. | **Learning Targets:**<br><br>● I can describe different reforestation techniques and their impact on forest restoration.<br>● I can evaluate case studies of successful forest conservation projects worldwide.<br>● I can assess the effectiveness of habitat restoration practices in promoting biodiversity.<br>● I can develop a management plan for a small forest area that includes conservation strategies.<br>● I can identify threats to forests, such as deforestation and climate change, and propose solutions. |
| **Supporting Standards:**<br><br>● **AFNR.ENR.4.D:** Examine the role of watershed management in preserving forest ecosystems. | |

## Animal Science

<table>
<tr><td>Unit: Getting Started</td><td>Duration: 5 days</td></tr>
<tr><td colspan="2">Unit Objectives:<br><br>Students will explore careers related to animal science and analyze current events in the field while building relationships through collaborative discussions and activities in the classroom.</td></tr>
<tr><td>Priority Standards:<br><br>● WCRS.CAR.3: Career Planning (PLAN) Based on what they know and have explored, develop a PLAN to reach individual education career goals.<br><br>● WCRS.CAR.3.CS.1: Analyze how issues, trends, technologies, and public policies impact AFNR systems.</td><td>Learning Targets:<br><br>● I can identify my personal strengths, interests, and skills related to careers in AFNR.<br>● I can research different career pathways within AFNR and determine the education and skills required.<br>● I can create a career plan that includes short-term and long-term goals.<br>● I can identify post-secondary education, certifications, or training needed for my career goals.</td></tr>
<tr><td colspan="2">Supporting Standards:<br><br>● CS.02: Demonstrate employability skills for college and career readiness.<br>● WCRS.LIF.1: Self-awareness, management, and responsibility Gain insight into oneself to help inform and build paths to success in personal, educational, and career settings.</td></tr>
</table>

<table>
<tr><td>Unit 1: Genetics</td><td>Duration: 10 days</td></tr>
<tr><td colspan="2">Unit Objective:<br><br>Explore genetic principles and their applications in animal breeding, focusing on how genetics influence traits and reproduction.</td></tr>
</table>

| **Priority Standards:** | **Learning Targets:** |
|---|---|
| ● **AFNR.AS.5.A:** Evaluate the male and female reproductive systems in selecting animals.<br>● **AFNR.AS.5.C:** Apply scientific principles in selection and breeding of animals.<br>● **AFNR.AS.5.D:** Compare and contrast scientific methods associated with animal reproduction. | ● I can explain the principles of genetics and how they apply to animal breeding.<br>● I can evaluate animal pedigrees and identify desirable genetic traits.<br>● I can compare natural breeding and advanced reproductive technologies.<br>● I can describe the function of male and female reproductive systems.<br>● I can apply genetic knowledge to select animals for specific breeding goals. |
| **Supporting Standards:**<br>● **AFNR.AS.1.C:** Evaluate the importance of the animal science industry to understand the impact on the global economy.<br>● **AFNR.AS.5.B:** Evaluate animals for breeding readiness and soundness. | |

| **Unit 2:** Animal Behavior | **Duration**: 10 days |
|---|---|
| **Unit Objective:**<br>Analyze animal behavior patterns to improve handling techniques, ensure safety, and enhance animal welfare. | |
| **Priority Standards**<br>● **AFNR.AS.7:** Apply principles of animal behavior, welfare, and handling for the safety of animals and humans.<br>● **AFNR.AS.6.A:** Demonstrate management techniques ensuring animal welfare.<br>● **AFNR.AS.3.B:** Demonstrate and/or | **Learning Targets:**<br>● I can identify and interpret animal behavior patterns.<br>● I can describe the different categories of animal behavior and explain their purpose.<br>● I can identify common animal behaviors and interpret what they communicate. |

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| recommend animal handling procedures to prevent hazards and increase the safety of humans and animals. | ● I can analyze how animal behavior affects human-animal interactions and safety.<br><br>● I can demonstrate proper animal handling techniques based on behavior cues. |
| **Supporting Standards:**<br><br>● **AFNR.AS.3.E:** Analyze biosecurity measures utilized to protect the welfare of humans and animals on a local, state, national, and global level.<br>● **AFNR.AS.7.B:** Comply with government regulations and safety standards for facilities used in animal production. | |

| **Unit 3:** Disease | **Duration**: 10 days |
|---|---|
| **Unit Objectives (overarching objectives):**<br><br>Investigate animal diseases, their causes, prevention strategies, and the impact on animal health and industry practices. | |
| **Priority Standards:**<br><br>● **AFNR.AS.3.C:** Design programs to prevent animal diseases, parasites, and other disorders to ensure animal welfare.<br><br>● **AFNR.AS.3.E:** Analyze biosecurity measures utilized to protect the welfare of humans and animals on a local, state, national, and global level.<br><br>● **AFNR.AS.3.D:** Recommend and demonstrate an animal health record-keeping system. | **Learning Targets:**<br><br>● I can identify common animal diseases, their causes, and symptoms.<br>● I can describe methods to prevent, diagnose, and treat animal diseases.<br>● I can develop and explain a disease prevention and biosecurity plan.<br>● I can analyze the effects of animal diseases on the industry and public health.<br>● I can maintain accurate animal health records for monitoring and compliance. |
| **Supporting Standards:** | |

- **AFNR.AS.4.A:** Analyze nutritional needs of animals.
- **AFNR.AS.3.B:** Demonstrate and/or recommend animal handling procedures to prevent hazards and increase the safety of humans and animals.

| **Unit 4:** Animal Products and Biotechnology | **Duration**: 10 days |
|---|---|
| **Unit Objective:**<br><br>Examine the role of animal products and biotechnology in advancing animal health, reproduction, and the agricultural industry. | |
| **Priority Standards:**<br><br>● **AFNR.AS.6.B:** Implement procedures to ensure that animal products are safe.<br>● **AFNR.AS.4.C:** Utilize industry tools to make animal nutrition decisions.<br>● **AFNR.AS.5.D:** Compare and contrast scientific methods associated with animal reproduction. | **Learning Targets:**<br><br>● I can identify and evaluate common animal products and their uses.<br>● I can explain biotechnology's role in improving animal health and productivity.<br>● I can analyze the ethical and legal implications of biotechnology in animal agriculture.<br>● I can evaluate the safety and quality of animal products through industry standards.<br>● I can describe emerging technologies and their impact on animal reproduction. |
| **Supporting Standards:**<br><br>● **AFNR.AS.1.B:** Analyze and apply laws and sustainable practices to animal agriculture from a global perspective.<br>● **AFNR.AS.9.C:** Connect and apply academic learning, knowledge, and technical skills to solve problems through a Supervised Agriculture Experience. | |

## Advanced Greenhouse 2.0

<table>
<tr><td>Unit: Getting Started</td><td>Duration: 5 days</td></tr>
<tr><td colspan="2">Unit Objective:<br><br>Students will explore careers related to greenhouse and analyze current events in the field while building relationships through collaborative discussions and activities in the classroom.</td></tr>
<tr><td>Priority Standards:<br><br>● WCRS.CAR.3: Career Planning (PLAN) Based on what they know and have explored, develop a PLAN to reach individual education career goals.<br><br>● WCRS.CAR.3.CS.1: Analyze how issues, trends, technologies, and public policies impact AFNR systems.</td><td>Learning Targets:<br><br>● I can identify my personal strengths, interests, and skills related to careers in AFNR.<br>● I can research different career pathways within AFNR and determine the education and skills required.<br>● I can create a career plan that includes short-term and long-term goals.<br>● I can identify post-secondary education, certifications, or training needed for my career goals.</td></tr>
<tr><td colspan="2">Supporting Standards:<br><br>● CS.02: Demonstrate employability skills for college and career readiness.<br>● WCRS.LIF.1: Self-awareness, management, and responsibility Gain insight into oneself to help inform and build paths to success in personal, educational, and career settings.</td></tr>
</table>

<table>
<tr><td>Unit 1: Advanced Greenhouse Operations & Management</td><td>Duration: 10 days</td></tr>
<tr><td colspan="2">Unit Objectives:<br><br>Students will apply greenhouse management techniques, including environmental controls, pest management, and efficiency strategies, to maintain a productive greenhouse.</td></tr>
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|---|---|
| **Priority Standards:**<br><br>● **AFNR.PS.3.B:** Prepare growing media for use in plant systems.<br><br>● **AFNR.PS.3.A:** Determine influence of environmental factors on plant growth.<br><br>● **AFNR.PS.3.A:** Determine influence of environmental factors on plant growth. | **Learning Targets:**<br><br>● I can monitor and adjust temperature, humidity, and light levels for optimal plant growth.<br>● I can identify and manage pests and diseases in a greenhouse setting.<br>● I can evaluate and implement efficiency improvements in greenhouse operations.<br>● I can maintain and troubleshoot greenhouse systems, including irrigation and ventilation.<br>● I can analyze plant health and adjust growing conditions accordingly. |
| **Supporting Standards:**<br><br>● **AFNR.PS.4.1:** Evaluate the impact of different plant production techniques on yield and quality.<br>● **AFNR.PS.4.C:** Develop and implement a plan for integrated pest management (IPM). | |

| **Unit 2:** Greenhouse Business & Marketing | **Duration:** 10 days |
|---|---|
| **Unit Objective:**<br><br>Students will develop business, financial, and marketing plans to manage greenhouse sales, product pricing, and customer engagement. | |
| **Priority Standards**<br><br>● **AFNR.ABS.1.B:** Use agribusiness applications.<br><br>● **AFNR.ABS.1.E:** Analyze current and future trends in agriculture and agribusiness. | **Learning Targets:**<br><br>● I can create a greenhouse business plan, including financial projections.<br>● I can develop a marketing strategy for greenhouse products.<br>● I can track greenhouse production costs and calculate profitability.<br>● I can use record-keeping tools to |

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| • **AFNR.ABS.2.A:** Design and implement a personal financial management plan.<br><br>• **AFNR.ABS.2.C:** Apply the principles of entrepreneurship to an agribusiness or businesses. | manage financial data for an agribusiness.<br>• I can analyze market trends to make informed pricing and sales decisions. |
| **Supporting Standards:**<br><br>• **AFNR.ABS.3.A:** Prepare and maintain files needed to accomplish effective record keeping. | |

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|---|---|
| **Unit 3:** Advanced Plant Production & Specialty Crops | **Duration:** 10 days |
| **Unit Objectives (overarching objectives):**<br><br>Students will apply advanced techniques in plant production, including hydroponics, propagation, and specialty crop management, to increase greenhouse efficiency and sustainability. | |
| **Priority Standards:**<br><br>• **AFNR.PS.5.C:** Manage a plant production system.<br><br>• **AFNR.PS.3.C:** Develop and implement a fertilization plan for specific plants in various production systems including agronomy, fruit systems, gardens, nurseries and/or CEA/greenhouse crops.<br><br>• **AFNR.PS.4.B:** Develop and implement a plant management plan for crop production. | **Learning Targets:**<br><br>• I can propagate plants using different techniques (cuttings, grafting, etc.).<br>• I can compare soil-based and hydroponic growing systems.<br>• I can manage specialty crops, including herbs, flowers, and vegetables, for greenhouse sales.<br>• I can implement sustainable greenhouse practices to improve efficiency.<br>• I can evaluate new plant varieties for profitability and customer demand. |
| **Supporting Standards:** | |

- **AFNR.PS.5.D:** Manage equipment in a plant production system.

| **Unit 4:** SAE – Greenhouse Entrepreneurship Project | **Duration:** 10 days |
|---|---|
| **Unit Objectives:**<br><br>Students will independently manage a greenhouse-based Supervised Agricultural Experience (SAE) project, tracking finances, production, and marketing efforts. | |
| **Priority Standards:**<br><br>● **AFNR.PS.7.A:** Evaluate and implement steps and requirements to pursue a career opportunity in an AFNR career pathway.<br><br>● **AFNR.ABS.3.A:** Prepare and maintain files needed to accomplish effective record keeping.<br><br>● **AFNR.PS.7.C:** Connect and apply academic learning, knowledge and technical skills to solve problems through a Supervised Agriculture Experience. | **Learning Targets:**<br><br>● I can develop and execute a greenhouse SAE project from start to finish.<br>● I can track my greenhouse project's financials, including expenses and profits.<br>● I can create and follow a marketing plan for my greenhouse product.<br>● I can present my SAE project results using data and personal reflection.<br>● I can evaluate my project and identify areas for improvement. |
| **Supporting Standards:**<br><br>● **AFNR.SAEP.4.1:** Communicate the impact of an SAE project through presentations and reports. | |

# High School FACE Curriculum

## FAMILY AND CONSUMER EDUCATION

**MISSION STATEMENT**

Family and Consumer Sciences prepares students for the roles within the family and to develop necessary skills for the working world. It is within the family that we learn how to relate, care for, and help others. We obtain these skills by cooking, laundry, learning about relationships, childcare, and parenting. Additionally, we learn about the working world through interactions of role-playing, problem-solving, career research, and developing other ways of thinking. Finally, students need to attain the knowledge, attributes, and skills, to be a contributing member of the family and the working world to deal creatively and effectively with life-related concerns now and in the future.

**BROAD GOALS**

Quality family and consumer education in the Holmen School District includes the following goals:

**Goal 1** To help students become competent family members and self-sufficient individuals.

**Goal 2** To encourage the development of an individual's potential and creative abilities

**Goal 3** To create an awareness of the numerous career opportunities in the Family and Consumer Education field.

**Goal 4** To aid and develop decision-making skills for future employment.

**COLLEGE CREDIT OPTION-TRANSCRIPTED CREDIT**

College credit agreements are in place between Holmen High School and the Wisconsin Technical College System and UW system whereby a student will receive Wisconsin Technical College System credit for courses taken while in high school. There is no additional fee for these credits.

**Western Technical College Credit Opportunities for**
**Family and Consumer Education Classes taken at HHS**

| HHS Class | Western Class and Credits Earned |
|---|---|
| Child Development (TC) | ECE: Child Development (3 credits) |

**Please note:** Students that earn a "C" or higher (on Western/CVTC's grading scale) AND complete all of the post secondary course competencies will earn both high school and college credit for the course. College credit earned is at no cost to the student.

| Course | Pre-Req/Notes | Credit | Grade Level | | | |
|---|---|---|---|---|---|---|
| | | | 9 | 10 | 11 | 12 |
| **Level 1 (Introductory Courses)** | | | | | | |
| Parenting | | .5 | E | E | E | E |
| Foods 1 | | .5 | | | E | E |
| **Level 2** | | | | | | |
| Child Development (TC) | | .5 | | E | E | E |
| Foods 2 | Yes | .5 | | | E | E |
| Youth Apprenticeship: Hospitality and Tourism | Meet the criteria of the application | 2 | | | E | E |
| Capstone: Family &Consumer Ed | Meet the criteria of the application | .5 | | | | E |

**TC = Transcripted Credit;** E=Elective and the year student is eligible to take the course

# Parenting

| **Unit:** Parenting: A Rewarding Choice Ch. 1 | **Duration**: 1 Week |
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| **Essential Questions/Objectives:**<br><br>● What are the rewards of being a parent?<br>● What are some of the common myths about parenthood?<br>● What are the overall job responsibilities of parents to the parenting needs of children? | |
| **Priority Standards:**<br><br>● **FCS.FP.1.A:** Analyzing roles and responsibilities of parenting<br>○ **FCS.FP.1.A.a.2:** Analyze expectations and responsibilities of parenting<br>○ **FCS.FP.1.A.a.3:** Analyze influences of parenting practices on individuals, families, and society.<br>○ **FCS.FP.1.A.a.5:** Explain cultural differences and similarities in roles and responsibilities of parenting.<br><br>● **FCS.FP.1.E:** Analyze the effects of family as a system on individuals and society.<br>○ **FCS.FP.1.E.i.1:** Describe the different types of families and what characterizes a family.<br>○ **FCS.FP.1.E.i.2:** Discuss the role of family in transmitting societal expectations. | **Assessments & Learning Targets**:<br><br>*Students will be able to/understand:*<br><br><u>Unit Test:</u><br>☐ Analyze the differing roles and responsibilities of parents.<br>☐ Apply concepts of flexible daily scheduling.<br>☐ Apply concepts of family dynamics, economics, etc. to determine family size.<br>☐ Describe the complex societal views and expectations of parenting. |
| **Supporting Standards:**<br><br>● **WCRS.LIF.1:** Self - Awareness management, and responsibility. Gain insight into oneself to help inform and build paths to success and personal, educational, and career settings.<br>○ **WCFS.LIF.1.B:** Manage emotions and behaviors effectively in academic and workplace situations.<br>○ **WCRS.LIF.1.C:** Take responsibility and accountability for actions, behaviors, and commitments. | |

- **WCRS.LRN.2:** Critical thinking and problem - solving. Develop the motivation and acquire the critical thinking and creative problem - solving skills needed to prepare for future education and careers.
    - **WCRS.LRN.2.C:** Develop persistence, initiative, and self - direction in problem - solving and goal attainment.

| **Unit:** Families and Parents Ch. 2 | **Duration**: 1 Week |
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| **Essential Questions/Objectives:**<br><br>● How are families formed?<br>● What are the stages of the family life cycle?<br>● How to describe the five family structures and the unique characteristics of each?<br>● How does the family operates as a social system?<br>● What other factors affect parents' goals and interactions with their children? | |
| **Priority Standards:**<br><br>● **FCS.FP.1.C:** Evaluate external support systems that provide services for parents and caregivers.<br>○ **FCS.FP.1.C.i.3:** Explore current laws and policies related to parenting.<br>● **FCS.FP.1.D:** Analyze factors related to preparing for parenthood.<br>○ **FCS.FP.1.D.b.3:** identify alternatives to biological parenthood.<br><br>● **FCS.FP.1.E:** Analyze the effects of family as a system on individuals and society.<br>○ **FCS.FP.1.E.i.1:** Describe the different types of families and what characterizes a family.<br>○ **FCS.FP.1.E.i.2:** Discuss the role of family in transmitting societal expectations. | **Assessments & Learning Targets**:<br><br>*Students will be able to/understand:*<br><br><u>Unit Test:</u><br>☐ List and describe relationships of various family members for differing family structures.<br>☐ Analyze the structure of different kinds of families, including non-biological families.<br>☐ That families develop in stages.<br>☐ Summarize laws and processes around the foster system, guardianship, and adoption. |
| **Supporting Standards:** | |

- **WCRS.LIF.1:** Self - Awareness management, and responsibility. Gain insight into oneself to help inform and build paths to success and personal, educational, and career settings.
    - **WCFS.LIF.1.B:** Manage emotions and behaviors effectively in academic and workplace situations.
    - **WCRS.LIF.1.C:** Take responsibility and accountability for actions, behaviors, and commitments.
- **WCRS.LRN.2:** Critical thinking and problem - solving. Develop the motivation and acquire the critical thinking and creative problem - solving skills needed to prepare for future education and careers.
    - **WCRS.LRN.2.C:** Develop persistence, initiative, and self - direction in problem - solving and goal attainment.

| **Unit:** Developing an Effective Parenting Style Ch. 5 | **Duration**: 1 Week |
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**Essential Questions/Objectives:**

- How to distinguish among three types of parenting styles?
- How to analyze the influence of effective communication on parent-child relationships, including the use of active listening and verbal and nonverbal communication?
- What are the three types of problem ownership?
- What are the ways that parents develop self-control and self-discipline in their children?
- How to contrast punishment with natural and logical consequences for misbehavior?

| **Priority Standards:** | **Assessments & Learning Targets**: |
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| ● **FSC.FP.1.B:** Evaluate parenting practices that support human development.<br>○ **FCS.FP.1.B.a.3:** Asses common practices and emerging research about influences of discipline on human development.<br><br>● **FCS.FP.1.A:** Analyze roles and responsibilities of parenting.<br>○ **FCS.FP.1.A.a.1:** Analyze | *Students will be able to/understand:*<br><br><u>Unit Test:</u><br>☐ Identify the different parenting styles.<br>☐ Describe active listening and open communication for child and parent.<br>☐ Identify the different problem solving strategies<br>☐ Analyze realistic expectations to help a child develop positive self concept and self esteem |

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| parenting roles across the life span.<br>○ **FCS.FP.1.A.a.2:** Analyze expectations and responsibilities of parenting.<br>○ **FCS.FP.1.A.a.3:** Analyze influences of parenting practices on individuals, families, and society. | ☐ Set appropriate behavioral expectations and respond accordingly to child's behavior.<br>☐ Explain how parents can continue to learn about parenting methods |

**Supporting Standards:**

- **WCRS.LIF.1:** Self - Awareness management, and responsibility. Gain insight into oneself to help inform and build paths to success and personal, educational, and career settings.
  - **WCFS.LIF.1.B:** Manage emotions and behaviors effectively in academic and workplace situations.
  - **WCRS.LIF.1.C:** Take responsibility and accountability for actions, behaviors, and commitments.
- **WCRS.LRN.2:** Critical thinking and problem - solving. Develop the motivation and acquire the critical thinking and creative problem - solving skills needed to prepare for future education and careers.
  - **WCRS.LRN.2.C:** Develop persistence, initiative, and self - direction in problem - solving and goal attainment.

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| **Unit:** Pregnancy Ch. 8 | **Duration**: 2 Weeks |

**Essential Questions/Objectives:**

- What are the biological processes related to prenatal development and the health of the mother and child?
- What are signs that may indicate pregnancy?
- How to confirm pregnancy?
- What are the physical changes and possible complications that occur during pregnancy?

| **Priority Standards:** | **Assessments & Learning Targets**: |
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| ● **FCS.FP.1.D:** Analyze factors related to preparing for parenthood.<br>○ **FCS.FP.1.D.a.1:** Analyze biological processes related to prenatal development, birth and health of child and mother.<br>○ **FCS.FP.1.D.i.2:** Explore the social and emotional factors that impact prenatal development and birth in relation to the health of parents and child. | *Students will be able to/understand:*<br><br><u>Unit Test:</u><br>☐ Describe the process of conception and embryonic development through the time of birth.<br>☐ Analyze various tests and prenatal complications that may occur during pregnancy.<br>☐ Describe how the prenatal stages differ.<br>☐ Discuss the emotional components of pregnancy. |
| **Supporting Standards:**<br><br>● **WCRS.LIF.1:** Self - Awareness management, and responsibility. Gain insight into oneself to help inform and build paths to success and personal, educational, and career settings.<br>○ **WCFS.LIF.1.B:** Manage emotions and behaviors effectively in academic and workplace situations.<br>○ **WCRS.LIF.1.C:** Take responsibility and accountability for actions, behaviors, and commitments.<br>● **WCRS.LRN.2:** Critical thinking and problem - solving. Develop the motivation and acquire the critical thinking and creative problem - solving skills needed to prepare for future education and careers.<br>○ **WCRS.LRN.2.C:** Develop persistence, initiative, and self - direction in problem - solving and goal attainment. | |

| **Unit:** Planning a Family/Birth Defects Project Base Ch. 7 pg. 166-171 | **Duration**: 2 Weeks |
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| **Essential Questions/Objectives:**<br><br>● What are birth defects and what issues do parents have to do to help with this? | |
| **Priority Standards:** | **Assessments & Learning Targets**: |

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| • **FCS.FP.1.D:** Analyze factors related to preparing for parenthood.<br>  ○ **FCS.FP.1.D.a.1:** Analyze biological processes related to prenatal development, birth and health of child and mother.<br>  ○ **FCS.FP.1.D.i.2:** Explore the social and emotional factors that impact prenatal development and birth in relation to the health of parents and child. | *Students will be able to/understand:*<br><br><u>Unit Quiz:</u><br>☐ Describe the major fertility issues for men and women.<br>☐ List health-related pregnancy risks<br><br><u>Unit Project:</u><br>☐ Analyze the various birth defects including causes, symptoms, tests and diagnostics, treatment, and prevention. |

**Supporting Standards:**

- **WCRS.LIF.1:** Self - Awareness management, and responsibility. Gain insight into oneself to help inform and build paths to success and personal, educational, and career settings.
  - **WCFS.LIF.1.B:** Manage emotions and behaviors effectively in academic and workplace situations.
  - **WCRS.LIF.1.C:** Take responsibility and accountability for actions, behaviors, and commitments.
- **WCRS.LRN.2:** Critical thinking and problem - solving. Develop the motivation and acquire the critical thinking and creative problem - solving skills needed to prepare for future education and careers.
  - **WCRS.LRN.2.C:** Develop persistence, initiative, and self - direction in problem - solving and goal attainment.

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| **Unit:** Childbirth Ch. 11 | **Duration**: 2 Weeks |

**Essential Questions/Objectives:**

- What are the signs of labor?
- How are common labor and childbirth procedures before, during and after labor?
- What are the identifying key events in each stage of labor?
- What are ways new parents can adjust during the postpartum period?

| **Priority Standards:** | **Assessments & Learning Targets**: |
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| ● **FCS.FP.1.D:** Analyze factors related to preparing for parenthood.<br>○ **FCS.FP.1.D.a.1**: Analyze biological processes related to prenatal development, birth and health of child and mother.<br>● **FCS.FP.1.D.i.2:** Explore the social and emotional factors that impact prenatal development and birth in relation to the health of parents and child. | *Students will be able to/understand:*<br><br><u>Unit Test:</u><br>☐ Describe the stages and main events of each stage of labor.<br>☐ Compare and contrast the purposes of the Agar and Brazelton scales.<br>☐ Analyze different birthing processes and the reasons for each<br>☐ Summarize how a woman's body adjusts following childbirth.<br>☐ Describe the physical and emotional changes following childbirth. |
| **Supporting Standards:**<br><br>● **WCRS.LIF.1:** Self - Awareness management, and responsibility. Gain insight into oneself to help inform and build paths to success and personal, educational, and career settings.<br>○ **WCFS.LIF.1.B:** Manage emotions and behaviors effectively in academic and workplace situations.<br>○ **WCRS.LIF.1.C:** Take responsibility and accountability for actions, behaviors, and commitments.<br>● **WCRS.LRN.2:** Critical thinking and problem - solving. Develop the motivation and acquire the critical thinking and creative problem - solving skills needed to prepare for future education and careers.<br>○ **WCRS.LRN.2.C:** Develop persistence, initiative, and self - direction in problem - solving and goal attainment. | |

## Foods 1

| **Unit:** Foods 1 Safeguarding the Family's Health | **Duration**: 2 weeks |
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| **Essential Questions/Objectives:** | |

- What are the causes, symptoms, and treatment of common foodborne illnesses?
- What are examples of how following good safety practices can help you prevent kitchen accidents?
- What are the basic first aid measures in the home?

**Priority Standards:**

- **FCS.FSD.1.b:** Apply risk management procedures to food safety, food testing and sanitation
    - **FCS.FSD1.B.b.1:** Describe factors that contribute to food borne illness
    - **FCS.FSD1.B.a.3:** Demonstrate practices and procedures that assure personal and workplace health and hygiene.
    - **FCSFSD1.Bi5.:** Classify cleaning materials and sanitizers and their correct use.

- **FCS.FSD.1.F:** Demonstrate food science dietetics and nutrition management principles and practices.
    - **FCS.FSD.1.F.a.7:** Utilize Food Code Points of time, temperature, date markings, cross contamination, hand washing and personal hygiene as criteria for safe food preparation.

- **FCS.CAFS.1.B:** Demonstrate food safety and sanitation procedures.
    - **FCS.CAFS.1.B.a.1:** Identify characteristics of major food borne pathogens, their role in causing illnesses, foods involved in outbreaks and methods of prevention.
    - **FCS.CAFS.1.B.a.2:** Employ food service management safety/sanitation program procedures, including CPR

**Assessments & Learning Targets**:

*Students will be able to/understand:*

<u>Most Unwanted Bacteria Presentation:</u>

- ☐ Name a bacterium and identify what it looks like.
- ☐ List the foods and sources associated with the bacterium and possible contaminants.
- ☐ List the steps for prevention of the bacterium
- ☐ List what the bacterium needs to thrive, incubation period, and the symptoms associated with the illness.
- ☐ Describe the bacterium's implication in the Farm-to-Table Continuum.

<u>Observational Assessment:</u>

- ☐ Demonstrate proper dishwashing, handwashing, countertops, table cleaning, and laundry.
- ☐ That hot water and proper detergent is required for clearing dishes, laundry, and handwashing.

<u>Safety and Sanitation Quiz:</u>

- ☐ Burn and other kitchen accident prevention.
- ☐ Proper handwashing technique.
- ☐ Proper cooking temperatures for food safety

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| and First aid.<br><br>● **FCS.CAFS.1.B.a.8:** Demonstrate safe food handling and preparation techniques that prevent cross contamination and cross contact from potentially hazardous foods.<br><br>● **FCS.NW.1.C:** Demonstrate ability to acquire, handle, and use foods to meet, nutrition, and wellness needs of individuals and families across the life span.<br>○ **FCS.NW.1.C.i.3:** Demonstrate food preparation skills.<br><br>● **FCS.NW.1.D:** Evaluate factors that affect food safety from production to consumption.<br>○ **FCS.NW.1.D.a.1:** Analyze conditions and safety and sanitation practices that promote safe food handling. | |

**Supporting Standards:**

- **WCRS.LIF.1:** Self - Awareness management, and responsibility. Gain insight into oneself to help inform and build paths to success and personal, educational, and career settings.
    a. **WCFS.LIF.1.B:** Manage emotions and behaviors effectively in academic and workplace situations.
    b. **WCRS.LIF.1.C:** Take responsibility and accountability for actions, behaviors, and commitments.
- **WCRS.LIF.2:** Interpersonal communication and collaboration. Use interpersonal skills to interact with others for positive outcomes and collective success.
    a. **WCRS.LIF.2.A:** Develop respectful and supportive relationships with people who are similar to and different from oneself.
    b. **WCRS.LIF.2.B:** Communicate and collaborate with others, using various modes of communication, across languages, cultures, and contexts.
    c. **WCRS.LIF.2.C:** Demonstrate openness to providing and accepting feedback.
- **WCRS.LIF.4:** Responsive leadership. Take individual and collective action that demonstrates responsibility, care, and purpose to create positive change.
    a. **WCRS.LIF.4.A:** Identify and practice different leadership styles and team roles.
    b. **WCRS.LIF.4.C:** Demonstrate effective team - building skills, facilitate goal - orientated group processes with concern with the people involved.
- **FCS.CAFS.1.B:** Demonstrate food safety and sanitation procedures.

    a. **FCS.CAFS.1.B.b.4:** Define and identify common food allergens.
- **WCRS.LRN.1:** Academic skills. Acquire academic skills and real - life experiences to prepare for further education and careers.
    a. **WCRS.RN.1.D:** Be Eager and willing to learn new knowledge and skills.
- **WCRS.LRN.2:** Critical thinking and problem - solving. Develop the motivation and acquire the critical thinking and creative problem - solving skills needed to prepare for future education and careers.
    a. **WCRS.LRN.2.C:** Develop persistence, initiative, and self - direction in problem - solving and goal attainment.

| **Unit:** Kitchen Utensils | **Duration**: 1 week |
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| **Essential Questions/Objectives:**<br><br>● How do specific kitchen utensils support the cooking process?<br>● How do you identify various small kitchen utensils and discuss their functions?<br>● What care is needed for cooking and baking utensils that you need to select?<br>● How to demonstrate the use of various pieces of small kitchen equipment, cookware, and bakeware? | |
| **Priority Standards:**<br><br>● **FCS.CAFS.1.C:** Demonstrate industry standards in selecting, using and maintaining food production and food service equipment.<br>○ **CFS.CAFS.1C.i.1**: Demonstrate proper usage and storage of common cooking tools and equipment.<br>○ **CFS.CAFS.1.C.i.2:** Demonstrate how to properly wash and sanitize dishes and cooking surfaces.<br><br>● **FCS.CAFS.1.E:** Demonstrate professional food proportion and techniques for all menu categories to produce a variety of food products that meet customer needs.<br>○ **FCS.CAFS.1.E.i.1:** Demonstrate basic skills and handling knives, tools, and | **Assessments & Learning Targets**:<br><br>*Students will be able to/understand:*<br><br><u>Small Equipment Identification Quiz</u><br>☐ Name, classify, and describe the uses of kitchen and baking utensils.<br><br><u>Observational Assessment</u><br>☐ Demonstrate selection and use of appropriate tools for lab situations.<br><br><u>Measurement, Abbreviations, and Conversions Quiz</u><br>☐ Appropriately name common measurement abbreviations<br>☐ Analyze the amount of given products using measurement conversions |

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| equipment safely.<br>○ **FCS.CAFS.1.E.i.3:** Demonstrate knowledge of portion control and proper scaling and measurement techniques. | |

**Supporting Standards:**

- **WCRS.LIF.1:** Self - Awareness management, and responsibility. Gain insight into oneself to help inform and build paths to success and personal, educational, and career settings.
    a. **WCFS.LIF.1.B:** Manage emotions and behaviors effectively in academic and workplace situations.
    b. **WCRS.LIF.1.C:** Take responsibility and accountability for actions, behaviors, and commitments.
- **WCRS.LIF.2:** Interpersonal communication and collaboration. Use interpersonal skills to interact with others for positive outcomes and collective success.
    a. **WCRS.LIF.2.A:** Develop respectful and supportive relationships with people who are similar to and different from oneself.
    b. **WCRS.LIF.2.B**: Communicate and collaborate with others, using various modes of communication, across languages, cultures, and contexts.
    c. **WCRS.LIF.2.C:** Demonstrate openness to providing and accepting feedback.
- **WCRS.LIF.4:** Responsive leadership. Take individual and collective action that demonstrates responsibility, care, and purpose to create positive change.
    a. **WCRS.LIF.4.A:** Identify and practice different leadership styles and team roles.
    b. **WCRS.LIF.4.C:** Demonstrate effective team - building skills, facilitate goal - orientated group processes with concern with the people involved.
- **FCS.CAFS.1.B:** Demonstrate food safety and sanitation procedures.
    a. **FCS.CAFS.1.B.b.4:** Define and identify common food allergens.
- **WCRS.LRN.1:** Academic skills. Acquire academic skills and real - life experiences to prepare for further education and careers.
    a. **WCRS.RN.1.D:** Be Eager and willing to learn new knowledge and skills.
- **WCRS.LRN.2:** Critical thinking and problem - solving. Develop the motivation and acquire the critical thinking and creative problem - solving skills needed to prepare for future education and careers.
    a. **WCRS.LRN.2.C:** Develop persistence, initiative, and self - direction in problem - solving and goal attainment.

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| **Unit:** Food Label Nutrition, Vegetables & Fruits | **Duration**: 3 weeks |

**Essential Questions/Objectives:**

- What are the tips to use when shopping for fresh and processed foods?
- How do you properly select and store vegetables and fruit?
- How do you prepare vegetables and fruit, preserving their colors, textures, flavors, and nutrients?

**Priority Standards:**

- **FCS.FSD.1.C:** Evaluate nutrition principles, food plans, preparation techniques and specialized dietary plans
  - **Fcs.FSD.1.C.b.1:** Identify nutrients.
  - **FCS.FSD.1.C.a.2:** Apply principles of food production to maximize nutrient retention in prepared foods

- **FCS.CAFS.1.E:** Demonstrate professional food proportion and techniques for all menu categories to produce a variety of food products that meet customer needs.
  - **FCS.CAFS.1.E.i.3:** Demonstrate knowledge of portion control and proper scaling and measurement techniques.
  - **CFS.CAFS.1.E.a.4:** Evaluate the impact of time, temperature, and cooking methods on a variety of foods.
  - **FCS.CAFS.1.E.a.2:** Demonstrate professional skills for a variety of cooking methods including roasting, broiling, smoking, grilling, sauteing, pan frying, deep frying, braising, stewing, poaching, steaming and baking using professional equipment and current technologies
  - **FCS.CAFS.1.E.i.7:** Prepare

**Assessments & Learning Targets**:

*Students will be able to/understand:*

<u>Food Label Nutrition Tests</u>

- ☐ Identify the volume of a product
- ☐ Identify main and secondary ingredients
- ☐ Identify individual and product serving size
- ☐ Determine calories per serving
- ☐ Analyze total fat, cholesterol, sodium, carbohydrates, sugars, vitamins, calcium, fiber, and protein of product of a daily value of a 2,000 calorie diet.

<u>Food Labs/Observational Assessment</u>

- ☐ Prepare foods using fresh, canned, and frozen fruits and vegetables
- ☐ Make true statements about the selection and storage of fruits and vegetables.
- ☐ Read and prepare a recipe as written including safe handling and proper measurement for prepared foods.
- ☐ Describe and answer questions about their preparation technique
- ☐ Share responsibilities and processes to complete labs.
- ☐ Use problem solving techniques to resolve issues as they arise.

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| various fruits, vegetables, starches, legumes, dairy products, fats and oils using safe handling techniques.<br><br>● **CFS.FSD.1.F:** Demonstrate food science, dietetics, nutrition management principles and practices.<br>○ **FCS.FSD.1.F.i.3:** Utilize a standardized recipe. | |

**Supporting Standards:**

- **FCS.CAFS.1.B:** Demonstrate food safety and sanitation procedures.
    a. **FCS.CAFS.1.B.b.4:** Define and identify common food allergens.
- **WCRS.LRN.1:** Academic skills. Acquire academic skills and real - life experiences to prepare for further education and careers.
    a. **WCRS.RN.1.D:** Be Eager and willing to learn new knowledge and skills.
- **WCRS.LRN.2:** Critical thinking and problem - solving. Develop the motivation and acquire the critical thinking and creative problem - solving skills needed to prepare for future education and careers.
    a. **WCRS.LRN.2.C:** Develop persistence, initiative, and self - direction in problem - solving and goal attainment.
- **WCRS.LIF.1:** Self - Awareness management, and responsibility. Gain insight into oneself to help inform and build paths to success and personal, educational, and career settings.
    a. **WCFS.LIF.1.B:** Manage emotions and behaviors effectively in academic and workplace situations.
    b. **WCRS.LIF.1.C:** Take responsibility and accountability for actions, behaviors, and commitments.
- **WCRS.LIF.2:** Interpersonal communication and collaboration. Use interpersonal skills to interact with others for positive outcomes and collective success.
    a. **WCRS.LIF.2.A:** Develop respectful and supportive relationships with people who are similar to and different from oneself.
    b. **WCRS.LIF.2.B:** Communicate and collaborate with others, using various modes of communication, across languages, cultures, and contexts.
    c. **WCRS.LIF.2.C:** Demonstrate openness to providing and accepting feedback.
- **WCRS.LIF.4:** Responsive leadership. Take individual and collective action that demonstrates responsibility, care, and purpose to create positive change.
    a. **WCRS.LIF.4.A:** Identify and practice different leadership styles and team roles.
    b. **WCRS.LIF.4.C:** Demonstrate effective team - building skills, facilitate goal - orientated group processes with concern with the people involved.

| **Unit:** Eggs, Meat, and Poultry | **Duration**: 3 weeks |
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| **Essential Questions/Objectives:**<br><br>● How do you cook eggs correctly for breakfast menus and use eggs as ingredients in other foods?<br>● How do you describe the principles and methods of cooking meat and poultry?<br>● What are the principles and methods for cooking eggs?<br>● What are the factors affecting the selection of meats?<br>● What are the methods of cooking meat?<br>● What are the methods for cooking poultry? | |
| **Priority Standards:**<br><br>● **FCS.FSD.1C:** Evaluate nutrition principles, food plans, preparation techniques and specialized dietary plans.<br>○ **FCS.FSD.1.C.a.2:** Apply principles of food production to maximize nutrient retention in prepared foods<br>● **FCS.CAFS.1.E:** Demonstrate professional food preparation methods and techniques for all menu categories to produce a variety of food products that meet customer needs.<br>○ **FCS.CAFS.1.E.i.1:** Demonstrate basic skills in handling knives, tools and equipment safely.<br>○ **FCS.CAFS.1.E.a.2:** Demonstrate professional skills for a variety of cooking methods including roasting, broiling, smoking, grilling, sauteing, pan frying, deep frying, braising, stewing, poaching, steaming and baking using professional equipment and current technologies<br>○ **FCS.CAFS.1.E.i.3:** Demonstrate knowledge of portion control and proper | **Assessments & Learning Targets**:<br><br>*Students will be able to/understand:*<br><br><u>Food Labs/Observational Assessment</u><br>☐ Demonstrate various cutting techniques and the safe handling of knives.<br>☐ Read and prepare a recipe as written including safe handling and proper measurement for prepared foods.<br>☐ Describe and answer questions about their preparation technique<br>☐ Safely handle and prepare eggs including cracking, halving, and separating an egg.<br>☐ Prepare poached, sunny side up, and over hard eggs.<br>☐ Brown, grill, bake,and broil meats<br>☐ Share responsibilities and processes to complete labs.<br>☐ Use problem solving techniques to resolve issues as they arise. |

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| scaling and measurement techniques.<br>○ **FCS.CAFS.1.E.i.4:** Apply the fundamentals of time, temperature and cooking methods to cooking, cooling, reheating and holding a variety of foods.<br>○ **FCS.CAFS.1.E.i.11:** Prepare breakfast meats, eggs, cereals, and batter products using safe handling techniques<br><br>● **CFS.FSD.1.F:** Demonstrate food science, dietetics, nutrition management principles and practices.<br>○ **FCS.FSD.1.F.i.3:** Utilize a standardized recipe. | |

**Supporting Standards:**

- **WCRS.LIF.1:** Self - Awareness management, and responsibility. Gain insight into oneself to help inform and build paths to success and personal, educational, and career settings.
  - **WCFS.LIF.1.B:** Manage emotions and behaviors effectively in academic and workplace situations.
  - **WCRS.LIF.1.C:** Take responsibility and accountability for actions, behaviors, and commitments.
- **WCRS.LIF.2:** Interpersonal communication and collaboration. Use interpersonal skills to interact with others for positive outcomes and collective success.
  - **WCRS.LIF.2.A:** Develop respectful and supportive relationships with people who are similar to and different from oneself.
  - **WCRS.LIF.2.B:** Communicate and collaborate with others, using various modes of communication, across languages, cultures, and contexts.
  - **WCRS.LIF.2.C:** Demonstrate openness to providing and accepting feedback.
- **WCRS.LIF.4:** Responsive leadership. Take individual and collective action that demonstrates responsibility, care, and purpose to create positive change.
  - **WCRS.LIF.4.A:** Identify and practice different leadership styles and team roles.
  - **WCRS.LIF.4.C:** Demonstrate effective team - building skills, facilitate goal - orientated group processes with concern with the people involved.
- **FCS.CAFS.1.B:** Demonstrate food safety and sanitation procedures.
  - **FCS.CAFS.1.B.b.4:** Define and identify common food allergens.
- **WCRS.LRN.1:** Academic skills. Acquire academic skills and real - life experiences to prepare for further education and careers.
  - **WCRS.RN.1.D:** Be Eager and willing to learn new knowledge and skills.
- **WCRS.LRN.2:** Critical thinking and problem - solving. Develop the motivation and

acquire the critical thinking and creative problem - solving skills needed to prepare for future education and careers.
    - **WCRS.LRN.2.C:** Develop persistence, initiative, and self - direction in problem - solving and goal attainment.

## Child Development

| **Unit:** Child Development Principles and Theories Ch. 4 | **Duration**: 3 Weeks |
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| **Essential Questions/Objectives:**<br><br>● What are the factors affecting the selection of dairy products?<br>● What are the ways to prepare dishes using milk, cream, cheese, and other dairy products? | |
| **Priority Standards:**<br><br>● **FCS.FP.1.B:** Evaluate parenting practices that support human development.<br>○ **FCS.FP.1.B.a.1:** Analyze nurturing practices that support human development<br>○ **FCS.FP.1.B.a.3:** Assess common practices and emerging research about influences of discipline on human development.<br><br>● **FCS.EEC.1.B:** Analyze developmentally appropriate and culturally responsive practices to plan for early childhood, education, and services.<br>○ **FCS.EEC.1.B.a.1:** Analyze child development theories and their implication for educational and child care | **Assessments & Learning Targets**:<br><br>*Students will be able to/understand:*<br><br><u>Child Development Theorist Presentation</u><br>☐ Assess and describe how child development theories are used in early childhood setting<br>☐ Identify and explain child development theoristsan<br>☐ Identify theoretical concepts related to theorists.<br>☐ Identify and explain the developmental stages<br><br><u>Vocabulary Test(s)</u><br>☐ Define terms specific to child development settings<br><br><u>Unit Test</u><br>☐ Choose appropriate activities (cognitive, physical, and emotional) to match the developmental stages. |

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| practices.<br>○ **FCS.EEC.1.B.b.5:** Describe strategies that promote growth and development in children, youth, and adults.<br><br>● **FCS.HD.1.A:** Analyze principles of human development across the lifespan.<br>○ **FCS.HD.1.A.i.3:** Discuss emerging research about human development, including, but not limiting, brain development research. | ☐ Describe brain growth and function<br>☐ Explain the impact of the environment on brain development<br>☐ Identify the optimal and critical periods of brain development<br>☐ Apply specific child development principles and theories to situations. |
| **Supporting Standards:**<br><br>● **WCRS.LIF.1:** Self - Awareness management, and responsibility. Gain insight into oneself to help inform and build paths to success and personal, educational, and career settings.<br>○ **WCFS.LIF.1.B:** Manage emotions and behaviors effectively in academic and workplace situations.<br>○ **WCRS.LIF.1.C:** Take responsibility and accountability for actions, behaviors, and commitments.<br>● **WCRS.LRN.2:** Critical thinking and problem - solving. Develop the motivation and acquire the critical thinking and creative problem - solving skills needed to prepare for future education and careers.<br>○ **WCRS.LRN.2.C:** Develop persistence, initiative, and self - direction in problem - solving and goal attainment. | |

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| **Unit:** Children, Ages 3-5 ch. 6 & 7 | **Duration**: 2 Weeks |
| **Essential Questions/Objectives:**<br><br>● How do 3 year olds develop physically, cognitive, socially, and emotionally?<br>● How does this relate to how the development will affect your role as a teacher?<br>● What are the details of physical, cognitive, and social-emotional development of 4 & 5 year olds?<br>● How to plan programs as a teacher for 4 & 5 year olds | |
| **Priority Standards:**<br><br>● **FCS.FP.1.B:** Evaluate parenting practices that support human | **Assessments & Learning Targets**:<br><br>*Students will be able to/understand:* |

development.
    - **FCS.FP.1.B.a.1:** Analyze nurturing practices that support human development
    - **FCS.FP.1.B.a.3:** Assess common practices and emerging research about influences of discipline on human development.

- **FCS.EEC.1.B:** Analyze developmentally appropriate and culturally responsive practices to plan for early childhood, education, and services.
    - **FCS.EEC.1.B.a.1:** Analyze child development theories and their implication for educational and child care practices.
    - **FCS.EEC.1.B.b.5:** Describe strategies that promote growth and development in children, youth, and adults.
- **FCS.HD.1.A:** Analyze principles of human development across the lifespan.
    - **FCS.HD.1.A.i.3:** Discuss emerging research about human development, including, but not limiting, brain development research.

<u>Unit Test</u>

- ☐ Define each of the developments: cognitive, physical, emotional
- ☐ Choose appropriate activities (cognitive, physical, and emotional) to match the developmental stages.
- ☐ Describe brain growth and function
- ☐ Explain the impact of the environment on brain development
- ☐ Identify the optimal and critical periods of brain development
- ☐ Apply specific child development principles and theories to situations
- ☐ Describe typical self-self help skills
- ☐ Describe development within each domain during the preschool years
- ☐ Explain the interrelationship of all developmental domains during the preschool years
- ☐ Apply theories to a child's growth and development during the preschool years.

**Supporting Standards:**

- **WCRS.LIF.1:** Self - Awareness management, and responsibility. Gain insight into oneself to help inform and build paths to success and personal, educational, and career settings.
    - **WCFS.LIF.1.B:** Manage emotions and behaviors effectively in academic and workplace situations.
    - **WCRS.LIF.1.C:** Take responsibility and accountability for actions, behaviors, and commitments.
- **WCRS.LRN.2:** Critical thinking and problem - solving. Develop the motivation and acquire the critical thinking and creative problem - solving skills needed to prepare for future education and careers.
    - **WCRS.LRN.2.C:** Develop persistence, initiative, and self - direction in problem

- solving and goal attainment.

| **Unit:** Middle Childhood Ch. 8 | **Duration**: 2 Weeks |
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| **Essential Questions/Objectives:**<br><br>● What are the health concerns of middle childhood?<br>● How to describe and explain the moral development during childhood?<br>● How to explain moral development during childhood? | |
| **Priority Standards:**<br><br>● **FCS.FP.1.B:** Evaluate parenting practices that support human development.<br>○ **FCS.FP.1.B.a.1:** Analyze nurturing practices that support human development<br>○ **FCS.FP.1.B.a.3:** Assess common practices and emerging research about influences of discipline on human development.<br><br>● **FCS.EEC.1.B:** Analyze developmentally appropriate and culturally responsive practices to plan for early childhood, education, and services.<br>○ **FCS.EEC.1.B.a.1:** Analyze child development theories and their implication for educational and child care practices.<br>○ **FCS.EEC.1.B.b.5:** Describe strategies that promote growth and development in children, youth, and adults.<br>● **FCS.HD.1.A:** Analyze principles of human development across the lifespan. | **Assessments & Learning Targets**:<br><br>*Students will be able to/understand:*<br><br><u>Unit Test</u><br>☐ Describe the development within each domain during the early school age years.<br>☐ Explain the interrelationship of all developmental domains during the early school age years.<br>☐ Apply theories to a child's growth and development during the early school age years.<br><br><u>Formative/Classroom Discussion</u><br>☐ Describe the effects of heredity on environment<br>☐ Describe the effects of environment on development<br>☐ Describe the effects of adverse childhood experiences on development<br>☐ Describe the effects of toxic stress on development<br>☐ Explain the interplay of the effects of heredity and the environment on mental health<br>☐ Describe cultural influences on development |

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| ○ **FCS.HD.1.A.i.3:** Discuss emerging research about human development, including, but not limiting, brain development research.<br>● **FCS.HD.1.B:** Analyze conditions that influence human development.<br>○ **FCS.HD.1.B.i.1:** Discuss the effect of heredity and environment on human development.<br>○ **FCS.HD.1.B.i.2:** Discuss the influence of social, economic, and technological forces on individual development.<br>○ **FCS.HD.1.B.b.4:** Identify life events that can influence an individuals physical, emotional, social, moral, and cognitive development. | ☐ Acknowledge family culture<br>☐ Identify socio-economic factors impacting child development (food insecurity)<br>☐ Identify family mental health issues impacting child development<br>☐ Identify the impact of technology on child development |
| **Supporting Standards:**<br>● **WCRS.LIF.1:** Self - Awareness management, and responsibility. Gain insight into oneself to help inform and build paths to success and personal, educational, and career settings.<br>○ **WCFS.LIF.1.B:** Manage emotions and behaviors effectively in academic and workplace situations.<br>○ **WCRS.LIF.1.C:** Take responsibility and accountability for actions, behaviors, and commitments.<br>● **WCRS.LRN.2:** Critical thinking and problem - solving. Develop the motivation and acquire the critical thinking and creative problem - solving skills needed to prepare for future education and careers.<br>○ **WCRS.LRN.2.C:** Develop persistence, initiative, and self - direction in problem - solving and goal attainment. | |

## Foods 2

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| **Unit:** Food 2 Safety/Foods 1 Review | **Duration**: 2 Weeks |
| **Essential Questions/Objectives:** | |

- What are the causes, symptoms, and treatment of common foodborne illnesses?
- What are examples of how following good safety practices can help you prevent kitchen accidents?
- What are the basic first aid measures in the home?
- How do specific kitchen utensils support the cooking process?

**Priority Standards:**

- **FCS.FSD.1.b:** Apply risk management procedures to food safety, food testing and sanitation
  - **FCS.FSD1.B.b.1:** Describe factors that contribute to food borne illness
  - **FCS.FSD1.B.a.3:** Demonstrate practices and procedures that assure personal and workplace health and hygiene.
  - **FCSFSD1.Bi5**: Classify cleaning materials and sanitizers and their correct use.
- **FCS.FSD.1.F:** Demonstrate food science dietetics and nutrition management principles and practices.
  - **FCS.FSD.1.F.a.7:** Utilize Food Code Points of time, temperature, date markings, cross contamination, hand washing and personal hygiene as criteria for safe food preparation.
- **FCS.CAFS.1.B:** Demonstrate food safety and sanitation procedures.
  - **FCS.CAFS.1.B.a.1:** Identify characteristics of major food borne pathogens, their role in causing illnesses, foods involved in outbreaks and methods of prevention.
  - **FCS.CAFS.1.B.a.2:** Employ food service management safety/sanitation program procedures, including CPR

**Assessments & Learning Targets**:

*Students will be able to/understand:*

<u>Public Service Announcement Summative Assessment:</u>

- ☐ Name a bacterium and identify what it looks like.
- ☐ List the foods and sources associated with the bacterium and possible contaminants.
- ☐ List the steps for prevention of the bacterium
- ☐ List what the bacterium needs to thrive, incubation period, and the symptoms associated with the illness.

<u>Small Equipment Identification Quiz</u>

- ☐ Name, classify, and describe the uses of kitchen and baking utensils.

<u>Measurement, Abbreviations, and Conversions Quiz</u>

- ☐ Appropriately name common measurement abbreviations
- ☐ Analyze the amount of given products using measurement conversions

<u>Safety and Sanitation Quiz:</u>

- ☐ Burn and other kitchen accident prevention.
- ☐ Proper handwashing technique.
- ☐ Proper cooking temperatures for food safety

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| and First aid.<br>○ **FCS.CAFS.1.B.a.8:** Demonstrate safe food handling and preparation techniques that prevent cross contamination and cross contact from potentially hazardous foods.<br><br>● **FCS.CAFS.1.E:** Demonstrate professional food proportion and techniques for all menu categories to produce a variety of food products that meet customer needs.<br>○ **FCS.CAFS.1.E.i.3:** Demonstrate knowledge of portion control and proper scaling and measurement techniques.<br>● **FCS.NW.1.C:** Demonstrate ability to acquire, handle, and use foods to meet, nutrition, and wellness needs of individuals and families across the life span.<br>○ **FCS.NW.1.C.a.3:** Demonstrate the ability to select, safely store, prepare, and serve nutritious and aesthetically pleasing foods.<br>● **FCS.NW.1.D:** Evaluate factors that affect food safety from production to consumption.<br>○ **FCS.NW.1.D.a.1:** Analyze conditions and safety and sanitation practices that promote safe food handling. | |
| **Supporting Standards:**<br><br>● **WCRS.LIF.1:** Self - Awareness management, and responsibility. Gain insight into oneself to help inform and build paths to success and personal, educational, and career settings.<br>○ **WCFS.LIF.1.B:** Manage emotions and behaviors effectively in academic and workplace situations.<br>○ **WCRS.LIF.1.C:** Take responsibility and accountability for actions, behaviors, and commitments. | |

- **WCRS.LIF.2:** Interpersonal communication and collaboration. Use interpersonal skills to interact with others for positive outcomes and collective success.
    - **WCRS.LIF.2.A:** Develop respectful and supportive relationships with people who are similar to and different from oneself.
    - **WCRS.LIF.2.B:** Communicate and collaborate with others, using various modes of communication, across languages, cultures, and contexts.
    - **WCRS.LIF.2.C:** Demonstrate openness to providing and accepting feedback.
- **WCRS.LIF.4:** Responsive leadership. Take individual and collective action that demonstrates responsibility, care, and purpose to create positive change.
    - **WCRS.LIF.4.A:** Identify and practice different leadership styles and team roles.
    - **WCRS.LIF.4.C:** Demonstrate effective team - building skills, facilitate goal - orientated group processes with concern with the people involved.
- **FCS.CAFS.1.B:** Demonstrate food safety and sanitation procedures.
    - **FCS.CAFS.1.B.b.4**: Define and identify common food allergens.
- **WCRS.LRN.1:** Academic skills. Acquire academic skills and real - life experiences to prepare for further education and careers.
    - **WCRS.RN.1.D:** Be Eager and willing to learn new knowledge and skills.
- **WCRS.LRN.2:** Critical thinking and problem - solving. Develop the motivation and acquire the critical thinking and creative problem - solving skills needed to prepare for future education and careers.
    - **WCRS.LRN.2.C:** Develop persistence, initiative, and self - direction in problem - solving and goal attainment.

| **Unit:** Breads Ch. 23 | **Duration**: 2 Weeks |
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| **Essential Questions/Objectives:**<br><br>● How to select and store baked goods.<br>● What are the steps to prepare quick breads and yeast breads? | |
| **Priority Standards:**<br><br>● **FCS.CAFS.1.E:** Demonstrate professional food preparation methods and techniques for all menu categories to produce a variety of food products that meet customer needs.<br>○ **FCS.CAFS.1.E.a.10:** Prepare breads, baked goods and desserts using safe handling and professional preparation | **Assessments & Learning Targets**:<br><br>*Students will be able to/understand:*<br><br><u>Food Labs/Observational Assessment</u><br>☐ Prepare dough<br>☐ Roll and shape dough<br>☐ Prepare a variety of types of coffee<br>☐ Read and prepare a recipe as written including safe handling and proper measurement for prepared foods. |

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| techniques.<br>○ **FCS.CAFS.1.E.a.12:** Demonstrate professional plating, garnishing and food presentation techniques.<br><br>● **FCS.FSD.1.D:** Apply basic concepts of nutrition and nutritional therapy in a variety of settings, considering social, geographical, cultural, and global influences.<br>○ **FCS.FSD.1.D.a.1:** Construct a modified diet based on nutritional need and health conditions. | ☐ Prepare a recipe for those with food sensitivities and/allergies.<br>☐ Describe and answer questions about their preparation technique<br>☐ Plate and describe dish<br>☐ Share responsibilities and processes to complete labs.<br>☐ Use problem solving techniques to resolve issues as they arise. |

**Supporting Standards:**

- **FCS.CAFS.1.C:** Demonstrate industry standards in selecting, using and maintaining food production and food service equipment.
  - **FCS.CAFS.1.C.a.1:** Operates, maintains & store tools and equipment following safety procedures and industry standards.
- **WCRS.LIF.1:** Self - Awareness management, and responsibility. Gain insight into oneself to help inform and build paths to success and personal, educational, and career settings.
  - **WCFS.LIF.1.B:** Manage emotions and behaviors effectively in academic and workplace situations.
  - **WCRS.LIF.1.C:** Take responsibility and accountability for actions, behaviors, and commitments.
- **WCRS.LIF.2:** Interpersonal communication and collaboration. Use interpersonal skills to interact with others for positive outcomes and collective success.
  - **WCRS.LIF.2.A:** Develop respectful and supportive relationships with people who are similar to and different from oneself.
  - **WCRS.LIF.2.B:** Communicate and collaborate with others, using various modes of communication, across languages, cultures, and contexts.
  - **WCRS.LIF.2.C:** Demonstrate openness to providing and accepting feedback.
- **WCRS.LIF.4:** Responsive leadership. Take individual and collective action that demonstrates responsibility, care, and purpose to create positive change.
  - **WCRS.LIF.4.A:** Identify and practice different leadership styles and team roles.
  - **WCRS.LIF.4.C:** Demonstrate effective team - building skills, facilitate goal - orientated group processes with concern with the people involved.

| **Unit:** Cakes, Cookies, Pies, and Candies | **Duration**: 2 Weeks |
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| **Essential Questions/Objectives:**<br><br>● What are the functions of basic ingredients used in cakes.<br>● What are the steps to prepare cakes, & cookies? | |
| **Priority Standards:**<br><br>● **FCS.CAFS.1.E:** Demonstrate professional food preparation methods and techniques for all menu categories to produce a variety of food products that meet customer needs.<br>○ **CFS.CAFS.1.E.a.1:** Demonstrate professional skills in safe handling of knives, tools and equipment.<br>○ **FCS.CAFS.1.E.a.3:** Assess the impact of portion control, proper scaling, and measurement techniques on the production cost on a variety of menu items.<br>○ **FCS.CAFS.1.E.a.10:** Prepare breads, baked goods and desserts using safe handling and professional preparation techniques.<br>○ **FCS.CAFS.1.E.a.12:** Demonstrate professional plating, garnishing and food presentation techniques.<br>● **FCS.CAFS.1.C:** Demonstrate industry standards in selecting, using and maintaining food production and food service equipment.<br>○ **FCS.CAFS.1.C.a.1:** Operate, maintain and store tools and equipment following safety<br>● **FCS.FSD.1.D:** Apply basic concepts of nutrition and nutritional therapy in a variety of settings, considering social, geographical, cultural, and global influences.<br>○ **FCS.FSD.1.D.a.1:** Construct a modified diet based on | **Assessments & Learning Targets**:<br><br>*Students will be able to/understand:*<br><br><u>Food Labs/Observational Assessment</u><br>☐ Demonstrate safe knife handling techniques<br>☐ Prepare dough<br>☐ Roll and shape dough<br>☐ Read and prepare a recipe as written including safe handling and proper measurement for prepared foods.<br>☐ Prepare a recipe for those with food sensitivities and/allergies.<br>☐ Describe and answer questions about their preparation technique<br>☐ Plate and describe dish<br>☐ Share responsibilities and processes to complete labs.<br>☐ Use problem solving techniques to resolve issues as they arise. |

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| nutritional need and health conditions. | |

**Supporting Standards:**

- **WCRS.LIF.1:** Self - Awareness management, and responsibility. Gain insight into oneself to help inform and build paths to success and personal, educational, and career settings.
    - **WCFS.LIF.1.B:** Manage emotions and behaviors effectively in academic and workplace situations.
    - **WCRS.LIF.1.C:** Take responsibility and accountability for actions, behaviors, and commitments.
- **WCRS.LIF.2:** Interpersonal communication and collaboration. Use interpersonal skills to interact with others for positive outcomes and collective success.
    - **WCRS.LIF.2.A:** Develop respectful and supportive relationships with people who are similar to and different from oneself.
    - **WCRS.LIF.2.B:** Communicate and collaborate with others, using various modes of communication, across languages, cultures, and contexts.
    - **WCRS.LIF.2.C:** Demonstrate openness to providing and accepting feedback.
- **WCRS.LIF.4:** Responsive leadership. Take individual and collective action that demonstrates responsibility, care, and purpose to create positive change.
    - **WCRS.LIF.4.A:** Identify and practice different leadership styles and team roles.
    - **WCRS.LIF.4.C:** Demonstrate effective team - building skills, facilitate goal - orientated group processes with concern with the people involved.
- **FCS.CAFS.1.B**: Demonstrate food safety and sanitation procedures.
    - **FCS.CAFS.1.B.b.4:** Define and identify common food allergens.
- **WCRS.LRN.1:** Academic skills. Acquire academic skills and real - life experiences to prepare for further education and careers.
    - **WCRS.RN.1.D**: Be Eager and willing to learn new knowledge and skills.
- **WCRS.LRN.2:** Critical thinking and problem - solving. Develop the motivation and acquire the critical thinking and creative problem - solving skills needed to prepare for future education and careers.
    - **WCRS.LRN.2.C:** Develop persistence, initiative, and self - direction in problem - solving and goal attainment.

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| **Unit:** Meat and Fish Ch. 19 & Ch. 21 | **Duration**: 1.5 Weeks |

**Essential Questions/Objectives:**

- What are the factors affecting the selection?
- What are the principles & methods of cooking meat?

- What are the factors affecting the selection of fish?
- What are the methods for cooking fish?

**Priority Standards:**

- **FCS.CAFS.1.E:** Demonstrate professional food preparation methods and techniques for all menu categories to produce a variety of food products that meet customer needs.
    - **FCS.CAFS.!.E.a.1:** Demonstrate professional skills in safe handling of knives, tools and equipment.
    - **FCS.CAFS.1.E.a.2:** Demonstrate professional skills for a variety of cooking methods including roasting, broiling, smoking, grilling, sauteing, pan frying, deep frying, braising, stewing, poaching, steaming and baking using professional equipment and current technologies
    - **FCS.CAFS.1.E.a.3:** Assess the impact of portion control, proper scaling, and measurement techniques on the production cost on a variety of menu items.
    - **FCS.CAFS.1.E.i.4:** Apply the fundamentals of time, temperature and cooking methods to cooking, cooling, reheating and holding a variety of foods.
    - **FCS.CAFS.1.E.a.12:** Demonstrate professional plating, garnishing and food presentation techniques.

**Assessments & Learning Targets**:

*Students will be able to/understand:*

<u>Food Labs/Observational Assessment</u>

- ☐ Demonstrate various cutting techniques and the safe handling of knives.
- ☐ Read and prepare a recipe as written including safe handling and proper measurement for prepared foods.
- ☐ Describe and answer questions about their preparation technique
- ☐ Plate and describe dish
- ☐ Safely handle and prepare fish and meat.
- ☐ Brown, grill, bake,and broil fish and meats
- ☐ Share responsibilities and processes to complete labs.
- ☐ Use problem solving techniques to resolve issues as they arise.

**Supporting Standards:**

- **WCRS.LIF.1:** Self - Awareness management, and responsibility. Gain insight into oneself to help inform and build paths to success and personal, educational, and

career settings.
    - **WCFS.LIF.1.B:** Manage emotions and behaviors effectively in academic and workplace situations.
    - **WCRS.LIF.1.C:** Take responsibility and accountability for actions, behaviors, and commitments.
- **WCRS.LIF.2:** Interpersonal communication and collaboration. Use interpersonal skills to interact with others for positive outcomes and collective success.
    - **WCRS.LIF.2.A:** Develop respectful and supportive relationships with people who are similar to and different from oneself.
    - **WCRS.LIF.2.B:** Communicate and collaborate with others, using various modes of communication, across languages, cultures, and contexts.
    - **WCRS.LIF.2.C:** Demonstrate openness to providing and accepting feedback.
- **WCRS.LIF.4:** Responsive leadership. Take individual and collective action that demonstrates responsibility, care, and purpose to create positive change.
    - **WCRS.LIF.4.A:** Identify and practice different leadership styles and team roles.
    - **WCRS.LIF.4.C:** Demonstrate effective team - building skills, facilitate goal - orientated group processes with concern with the people involved.
- **FCS.CAFS.1.B:** Demonstrate food safety and sanitation procedures.
    - **FCS.CAFS.1.B.b.4:** Define and identify common food allergens.
- **WCRS.LRN.1:** Academic skills. Acquire academic skills and real - life experiences to prepare for further education and careers.
    - **WCRS.RN.1.D:** Be Eager and willing to learn new knowledge and skills.
- **WCRS.LRN.2:** Critical thinking and problem - solving. Develop the motivation and acquire the critical thinking and creative problem - solving skills needed to prepare for future education and careers.
    - **WCRS.LRN.2.C:** Develop persistence, initiative, and self - direction in problem - solving and goal attainment.

| **Unit:** Dairy Products Ch. 17 | **Duration**: 1.5 Weeks |
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| **Essential Questions/Objectives:**<br><br>● What are the factors affecting the selection of dairy products?<br>● How to prepare a variety of dishes using milk, cream, cheese, and other dairy products? | |
| **Priority Standards:**<br><br>● **FCS.CAFS.1.E:** Demonstrate professional food preparation methods and techniques for all menu | **Assessments & Learning Targets**:<br><br>*Students will be able to/understand:*<br><br><u>Food Labs/Observational Assessment</u> |

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| categories to produce a variety of food products that meet customer needs.<br>○ **FCS.CAFS.1.E.a.3:** Assess the impact of portion control, proper scaling, and measurement techniques on the production cost on a variety of menu items.<br>○ **FCS.CAFS.1.E.i.4:** Apply the fundamentals of time, temperature and cooking methods to cooking, cooling, reheating and holding a variety of foods.<br>○ **FCS.CAFS.1.E.a.7:** Prepare various fruits, vegetables, starches, legumes, dairy products, fats and oils using safe handling and professional preparation techniques.<br>○ **FCS.CAFS.1.E.a.12:** Demonstrate professional plating, garnishing and food presentation techniques.<br><br>● **FCS.FSD.1.D:** Apply basic concepts of nutrition and nutritional therapy in a variety of settings considering social, geographical, cultural, and global influences.<br>○ **FCS.FSD.1.D.a.1:** Construct a modified diet based on nutritional need and health conditions. | ☐ Cook with milk, cream, and cheese<br>☐ Read and prepare a recipe as written including safe handling and proper measurement for prepared foods.<br>☐ Prepare a recipe for those with food sensitivities and/allergies.<br>☐ Describe and answer questions about their preparation technique<br>☐ Plate and describe dish<br>☐ Share responsibilities and processes to complete labs.<br>☐ Use problem solving techniques to resolve issues as they arise. |

**Supporting Standards:**

- **WCRS.LIF.1:** Self - Awareness management, and responsibility. Gain insight into oneself to help inform and build paths to success and personal, educational, and career settings.
  - **WCFS.LIF.1.B:** Manage emotions and behaviors effectively in academic and workplace situations.
  - **WCRS.LIF.1.C:** Take responsibility and accountability for actions, behaviors, and commitments.
- **WCRS.LIF.2:** Interpersonal communication and collaboration. Use interpersonal skills to interact with others for positive outcomes and collective success.

    - **WCRS.LIF.2.A:** Develop respectful and supportive relationships with people who are similar to and different from oneself.
    - **WCRS.LIF.2.B:** Communicate and collaborate with others, using various modes of communication, across languages, cultures, and contexts.
    - **WCRS.LIF.2.C:** Demonstrate openness to providing and accepting feedback.
- **WCRS.LIF.4:** Responsive leadership. Take individual and collective action that demonstrates responsibility, care, and purpose to create positive change.
    - **WCRS.LIF.4.A:** Identify and practice different leadership styles and team roles.
    - **WCRS.LIF.4.C:** Demonstrate effective team - building skills, facilitate goal - orientated group processes with concern with the people involved.
- **FCS.CAFS.1.B:** Demonstrate food safety and sanitation procedures.
    - **FCS.CAFS.1.B.b.4:** Define and identify common food allergens.
- **WCRS.LRN.1:** Academic skills. Acquire academic skills and real - life experiences to prepare for further education and careers.
    - **WCRS.RN.1.D:** Be Eager and willing to learn new knowledge and skills.
- **WCRS.LRN.2:** Critical thinking and problem - solving. Develop the motivation and acquire the critical thinking and creative problem - solving skills needed to prepare for future education and careers.
    - **WCRS.LRN.2.C:** Develop persistence, initiative, and self - direction in problem - solving and goal attainment.

# Middle School Business Curriculum

<table>
<tr><td>Unit: Keyboarding (6th Grade)</td><td>Duration: Semester (Every Other Day)</td></tr>
<tr><td colspan="2">Unit Objectives (overarching objectives):<br><br>Students will learn proper keyboarding techniques. The students will also work on skill building activities to increase speed and accuracy. A computerized program will be used to allow the students to individually increase their speed and accuracy.</td></tr>
<tr><td>Priority Standards:<br><br>● BIT.IT.1.A: Use various input technologies to enter and manipulate information appropriately.<br><br>● BIT.EL1.a: Use various input technologies to enter and manipulate information appropriately<br><br>● BIT.EL1.c: Use spreadsheet applications to solve problems and effectively communicate information.</td><td>Learning Targets:<br><br>1. Keyboarding Techniques & Accuracy<br><br>● Learning Target: Students will demonstrate correct finger placement and reaching techniques on an alphanumeric keyboard to improve typing accuracy and speed, aiming for a minimum proficiency of 5 words per minute (wpm) by grade level.<br><br>● Standard(s): BIT.IT.1.A.b.1<br><br>2. Numeric Keypad Proficiency<br><br>● Learning Target: Students will use the proper touch method on a numeric keypad to enter numerical data accurately and efficiently.<br><br>● Standard(s): BIT.IT.1.A.a.2<br><br>3. Data Entry Across Devices<br><br>● Learning Target: Students will practice entering data into various digital devices (e.g., computers, tablets, and smartphones) using appropriate input methods to maximize productivity.<br><br>● Standard(s): BIT.IT.1.A.b.2;</td></tr>
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| | BIT.IT.1.A.i.2<br><br>**4. Ergonomics & Healthy Typing Practices**<br><br>● **Learning Target:** Students will identify and describe proper ergonomics when using input technologies, including understanding how improper ergonomics can lead to repetitive stress injuries.<br><br>● **Standard(s):** BIT.IT.1.A.a.3<br><br>**5. Word Processing Skills**<br><br>● **Learning Target:** Students will apply the reviewing features of a word processor, including spell check, grammar check, word count, and thesaurus, to enhance the quality and accuracy of their typed documents.<br><br>● **Standard(s):** BIT.IT.1.B.b.1<br><br>**6. Timely Document Preparation**<br><br>● **Learning Target:** Students will demonstrate the ability to prepare documents in a timely manner, minimizing errors while ensuring the completion of tasks on schedule.<br><br>● **Standard(s):** BIT.IT.1.A.i.1<br><br>**7. Maximizing Productivity with Input Technologies**<br><br>● **Learning Target:** Students will apply various input technologies (such as keyboards and voice recognition software) to maximize productivity, ensuring they choose the best method for the task at hand.<br><br>● **Standard(s):** BIT.IT.1.A.i.2 |
| **Supporting Standards:** | |

- **BIT.IT.1.A.b.2:** Enter data into various digital devices
- **BIT.IT.1.A.i.2:** Apply a variety of input technologies to maximize productivity.
- **BIT.IT.1.A.a.2:** Demonstrate proper touch method on a numeric keypad.
- **BIT.IT.1.B.b.1:** Apply reviewing features of a word processor: spell check, grammar check, word count, and thesaurus.
- **BIT.IT.1.A.b.1:** Demonstrate correct finger placement and reaches on an alphanumeric keyboard. Recommended minimum proficiency: 5 wpm x grade level.
- **BIT.IT.1.A.i.1:** Prepare documents in a timely fashion without errors.
- **BIT.IT.1.A.a.3:** Describe proper ergonomics and repetitive stress issues related to input technologies.

| **Unit:** Computer Applications | **Duration:** Semester (Every Other Day) |
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| **Unit Objectives (overarching objectives):**<br><br>Students will be introduced to many of the Microsoft Office programs including Word, Excel and PowerPoint, as well as various other computer applications. The students will learn various tools and applications that will assist them in enhancing school projects now and in the future. | |
| **Priority Standards:**<br><br>● **BIT.IT.1.B:** Use word processing applications to organize and effectively communicate information.<br><br>● **BIT.CS.5.A:** Explain how computing innovations can have intended and unintended consequences.<br><br>● **BIT.CS.5.B:** Explain how the use of computing innovations may involve risks to personal safety and identity.<br><br>● **BIT.IT.1.B:** Use word processing applications to organize and effectively communicate information.<br><br>● **BIT.IT.1.C:** Use spreadsheet applications to solve problems and effectively communicate information. | **Learning Targets:**<br><br>**1. Understanding Computer Systems**<br><br>● **Learning Target:** Students will explain the features and functions of the components in a computer system, identifying key parts like the CPU, memory, storage, and input/output devices.<br><br>● **Standard(s):** BIT.HIT.1.A.i.1<br><br>**2. Operating System Functionality**<br><br>● **Learning Target:** Students will explain the purpose of an operating system and how it manages hardware resources, provides user interfaces, and supports software applications. |

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| | ● **Standard(s):** BIT.HIT.1.C.b.2<br><br>**3. Protection and Misuse of Computing Resources**<br><br>● **Learning Target:** Students will explain how computing resources can be protected and misused, including discussing the importance of cybersecurity measures and ethical technology use.<br><br>● **Standard(s):** BIT.CS.5.B.b.2<br><br>**4. Business Document Production**<br><br>● **Learning Target:** Students will produce functional and properly formatted business documents, ensuring documents meet professional standards for layout, structure, and content.<br><br>● **Standard(s):** BIT.IT.1.B.b.2<br><br>**5. Creating and Modifying Tables**<br>● **Learning Target:** Students will create and modify tables in word processing and spreadsheet applications, applying proper formatting and organization for clarity.<br>● **Standard(s):** BIT.IT.1.B.i.2<br><br>**6. Utilizing Templates, Themes, and Styles**<br><br>● **Learning Target:** Students will utilize templates, themes, and styles to improve productivity and efficiency in document creation, ensuring consistent formatting and professional design.<br><br>● **Standard(s):** BIT.IT.1.B.i.1<br><br>**7. Modifying Document Properties**<br><br>● **Learning Target:** Students will modify |

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| | basic document properties, such as title, author, and keywords, to ensure proper document organization and metadata management.<br><br>● **Standard(s):** BIT.IT.1.B.i.3<br><br>**8. Inserting and Modifying Graphic Elements**<br><br>● **Learning Target:** Students will insert and modify graphic elements such as pictures, videos, audio, SmartArt, 3D models, and screenshots in documents and presentations to enhance visual appeal and content.<br><br>● **Standard(s):** BIT.IT.1.B.i.4<br><br>**9. Using Advanced Formulas in Spreadsheets**<br><br>● **Learning Target:** Students will generate and apply advanced formulas in spreadsheets, using mathematical operators and functions to perform complex calculations and data analysis.<br><br>● **Standard(s):** BIT.IT.1.C.i.1<br><br>**10. Creating and Modifying Charts**<br><br>● **Learning Target:** Students will create, modify, and analyze charts in spreadsheet applications to visually represent data, making it easier to interpret and present information.<br><br>● **Standard(s):** BIT.IT.1.C.i.2<br><br>**11. Constructing Basic Formulas and Functions**<br><br>● **Learning Target:** Students will construct basic formulas and use common functions in spreadsheets to |

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| | perform calculations such as sums, averages, and other mathematical operations.<br><br>● **Standard(s):** BIT.IT.1.C.b.4<br><br>**12. Customizing Spreadsheet Views**<br><br>● **Learning Target:** Students will customize options and views in spreadsheets, including freezing worksheet rows and columns, changing window views, and displaying formulas to improve navigation and work efficiency.<br><br>● **Standard(s):** BIT.IT.1.C.i.9<br><br>**13. Managing Multiple Worksheets and Workbooks**<br><br>● **Learning Target:** Students will manage and use data across multiple worksheets and workbooks, applying functions to link and analyze data from different sources.<br><br>● **Standard(s):** BIT.IT.1.C.i.10<br><br>**14. Modifying Design Templates for Presentations**<br><br>● **Learning Target:** Students will modify design templates for presentations by customizing layouts, text, colors, and backgrounds to enhance the presentation's visual appeal and clarity.<br><br>● **Standard(s):** BIT.IT.1.D.i.1<br><br>**15. Creating Nonlinear Presentations with Hyperlinks**<br><br>● **Learning Target:** Students will create nonlinear presentations using hyperlinks to navigate between slides, |

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| | creating interactive and dynamic presentation experiences.<br><br>● **Standard(s):** BIT.IT.1.D.i.2<br><br>**16. Creating Tables with Appropriate Data Field Types**<br><br>● **Learning Target:** Students will create tables with appropriate data field types, ensuring that data is correctly organized, formatted, and easy to analyze.<br><br>● **Standard(s):** BIT.IT.1.E.i.1<br><br>These learning targets aim to develop both technical and productivity skills that are fundamental to mastering computer applications, ensuring students can effectively use various software tools for business, academic, and personal tasks. |

**Supporting Standards:**

- **BIT.CS.5.B.b.2:** Explain how computing resources can be protected and misused.
- **BIT.HIT.1.A.i.1:** Explain the features and functions of the components in a computer system.
- **BIT.HIT.1.C.b.2:** Explain the purpose of an operating system.
- **BIT.CS.5.B.b.2:** Explain how computing resources can be protected and misused.
- **BIT.IT.1.B.b.2:** Produce functional and properly formatted business documents.
- **BIT.IT.1.B.i.2:** Create and modify tables.
- **BIT.IT.1.B.i.1:** Utilize templates, themes, and styles to improve productivity and efficiency.
- **BIT.IT.1.B.i.3:** Modify basic document properties.
- **BIT.IT.1.B.i.4:** Insert and modify graphic elements: pictures, video, audio, SmartArt, 3D models, and screenshots.
- **BIT.IT.1.C.i.1:** Generate and apply advanced formulas utilizing mathematical operators and functions to perform calculations.
- **BIT.IT.1.C.i.2:** Create, modify, and analyze information in charts.
- **BIT.IT.1.C.b.4:** Construct basic formulas and use common functions to perform calculations.
- **BIT.IT.1.C.i.9:** Customize options and views including freezing worksheet rows and columns, changing window views, and displaying formulas.
- **BIT.IT.1.C.i.10:** Manage and use data among multiple worksheets and workbooks.
- **BIT.IT.1.D.i.1:** Modify design templates with custom layout, text, color, and backgrounds.

- **BIT.IT.1.D.i.2:** Create nonlinear presentations using hyperlinks.
- **BIT.IT.1.E.i.1:** Create tables with appropriate data field types.

| **Unit:** Entrepreneurship | **Duration:** Semester (Every Other Day) |
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| **Unit Objectives (overarching objectives):**<br><br>Entrepreneurship/Business Store Management will give students a chance to learn real world aspects of running a store. Through various hands-on lessons, students will order, produce products, promote & advertise, as well as handle the financial aspects of the store. The class will not only run the store, but develop various fundraising opportunities throughout the semester. | |
| **Priority Standards:**<br><br>● **BIT.EN.1.B.b.1:** Identify the characteristics and skills of a successful entrepreneur.<br><br>● **BIT.EN.1.A:** Describe the roles entrepreneurs play in today's economy.<br><br>● **BIT.EN.4.A:** Create a business model around a problem, need, or want.<br><br>● **BIT.EN.5.A:** Use financial tools to make sound business decisions.<br><br>● **BIT.EN.2.B:** Use cost analysis when planning products and services.<br><br>● **BIT.EN.2.A:** Analyze the components of successful entrepreneurial ventures.<br><br>● **BIT.EN.4.A:** Create a business model around a problem, need, or want. | **Learning Targets:**<br><br>**1. Understanding Entrepreneurial Characteristics**<br><br>● **Learning Target:** Students will list and describe the key characteristics of successful entrepreneurs, such as creativity, risk-taking, and resilience.<br><br>● **Standard(s):** BIT.EN.1.A.i.1<br><br>**2. Analyzing Successful Entrepreneurs' Traits**<br><br>● **Learning Target:** Students will analyze the characteristics and skills of successful entrepreneurs, including problem-solving, leadership, and adaptability.<br><br>● **Standard(s):** BIT.EN.1.B.i.1<br><br>**3. Identifying Leadership Traits in Entrepreneurs**<br><br>● **Learning Target:** Students will analyze personal traits indicative of leadership and |

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| | entrepreneurship-minded professionals, such as decisiveness, vision, and initiative.<br><br>● **Standard(s):** BIT.EN.1.B.i.2<br><br>**4. Developing a Business Plan**<br><br>● **Learning Target:** Students will develop a comprehensive business plan for a prospective entrepreneurial venture, covering all essential elements like market research, financial planning, and operations.<br><br>● **Standard(s):** BIT.EN.2.A.i.3<br><br>**5. Comparing Entrepreneurial Tools for Planning**<br><br>● **Learning Target:** Students will identify and compare different tools used by entrepreneurs for planning, including business model canvases, financial forecasting software, and marketing strategies.<br><br>● **Standard(s):** BIT.EN.2.A.i.4<br><br>**6. Understanding Production Costs**<br><br>● **Learning Target:** Students will list and explain the factors that determine the cost of producing a good or service, including labor, raw materials, overhead, and technology.<br><br>● **Standard(s):** BIT.EN.2.B.b.1<br><br>**7. Identifying Entrepreneurial Opportunities**<br><br>● **Learning Target:** Students will describe opportunities and problems that led to the development of successful entrepreneurial ventures, analyzing how entrepreneurs identify |

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| | and capitalize on market gaps.<br><br>● **Standard(s):** BIT.EN.4.A.i.3<br><br>**8. Understanding Business Startup Resources**<br><br>● **Learning Target:** Students will describe the various resources needed to start a business, including materials, labor, capital, and raw goods, and understand how to source and allocate these resources.<br><br>● **Standard(s):** BIT.EN.5.A.i.1<br><br>**9. Analyzing Startup Costs**<br><br>● **Learning Target:** Students will analyze the costs associated with starting a business, including initial capital investment, operational expenses, and hidden costs that may arise during the startup phase.<br><br>● **Standard(s):** BIT.EN.5.A.i.2<br><br>**10. Importance of Entrepreneurship in a Market Economy**<br><br>● **Learning Target:** Students will discuss the importance of entrepreneurship as a choice in a market economy, explaining how entrepreneurs contribute to economic growth, innovation, and job creation.<br><br>● **Standard(s):** BIT.EN.2.A.b.1<br><br>**11. Generating Alternative Solutions to Business Problems**<br><br>● **Learning Target:** Students will generate and evaluate alternative solutions to a given business problem, practicing creativity and critical thinking to explore multiple pathways |

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| | for success.<br><br>● **Standard(s):** BIT.EN.2.A.b.4<br><br>These learning targets help students develop a comprehensive understanding of entrepreneurship, from the foundational characteristics of successful entrepreneurs to the practical skills needed to launch and manage a business |

**Supporting Standards:**

- **BIT.EN.1.A.i.1:** List the characteristics of an entrepreneur.
- **BIT.EN.1.B.i.1:** Analyze the characteristics and skills of successful entrepreneurs
- **BIT.EN.1.B.i.2:** Analyze personal traits that are indicative of typical leaders and entrepreneurship minded professionals.
- **BIT.EN.2.A.i.3**: Develop a business plan for a prospective entrepreneurial venture.
- **BIT.EN.2.A.i.4:** Identify and compare tools used by entrepreneurs for planning.
- **BIT.EN.2.B.b.1:** List what determines the cost of producing a good or service.
- **BIT.EN.4.A.i.3:** Describe opportunities/problems that led to the development of successful entrepreneurial ventures.
- **BIT.EN.5.A.i.1:** Describe the resources needed to start a business: materials, labor, raw goods, etc.
- **BIT.EN.5.A.i.2:** Analyze the costs of starting a business venture.
- **BIT.EN.2.A.b.1**: Discuss the importance of entrepreneurship as a choice in a market economy.
- **BIT.EN.2.A.b.4**: Generate alternative solutions to a given problem.
- **BIT.EN.4.A.i.3:** Describe opportunities/problems that led to the development of successful entrepreneurial ventures.

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| **Unit:** Business Exploration (8th Grade) | **Duration:** Semester (Every Other Day) |

**Unit Objectives (overarching objectives):**

This course will introduce students to the world of business. This course will enable students to participate in a hands-on experience of running a business and a school store (Viking Shop). The class will organize as a business allowing students to research a product to sell, produce the product, and organize sales. Through this experience, students will learn how business decisions are made and how a business is run. Students will also be introduced to the stock market. Students will create a stock portfolio to invest in for the semester.

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| **Priority Standards:**<br><br>● **BIT.ACF.2.A:** Analyze the effects of changes in assets.<br>● **BIT.ACF.2.B:** Analyze the effects of changes in liabilities.<br>● **BIT.ACF.2.C:** Analyze the effects of changes in owner's equity.<br>● **BIT.BC.1.A:** Students will use active listening skills.<br>● **BIT.BC.1.B:** Students will apply the basic communication process.<br>● **BIT.BC.1.C:** Students will appropriately and effectively use technology in the communication process.<br>● **BIT.BC.1.D:** Students will participate in the reading and research process.<br>● **BIT.BC.2.A:** Students will demonstrate<br>● **BIT.BC.2.B:** Students will demonstrate collaborative<br>● communication with others when in a leadership role<br>● **BIT.BC.3.B:** Students will prepare concise, professional, and accurate business messages and documents. professionalism and business etiquette during the communication process.<br>● **BIT.BC.4.A:** Students will demonstrate basic speaking skills and techniques.<br>● **BIT.BC.4.B:** Students will demonstrate the ability to deliver appropriate and effective presentations.<br>● **BIT.BC.5.A:** Students will demonstrate successful employment communication skill<br>● **BIT.DCM.1.A**: Prepare documents for publishing to web, print, and other digital devices.<br>● **BIT.DCM.1.B:** Design, create, and deliver digital presentations. | **Learning Targets:**<br><br>**1. Recognizing Business Ownership**<br><br>● **Learning Target:** Students will recognize the items a business owns, including physical assets, intellectual property, and financial resources.<br><br>● **Standard(s):** BIT.ACF.2.A.b.2<br><br>**2. Bank Reconciliation**<br><br>● **Learning Target:** Students will reconcile a bank statement, identifying discrepancies between bank records and business records.<br><br>● **Standard(s):** BIT.ACF.2.A.b.3<br><br>**3. Understanding Liabilities**<br><br>● **Learning Target:** Students will define liabilities and identify various types of liabilities that businesses incur, such as short-term debts, loans, and accounts payable.<br><br>● **Standard(s):** BIT.ACF.2.B.b.2<br><br>**4. Defining Revenue**<br><br>● **Learning Target:** Students will define revenue and explain its role in the financial health of a business.<br><br>● **Standard(s):** BIT.ACF.2.C.b.1<br><br>**5. Understanding Expenses**<br><br>● **Learning Target:** Students will define expenses and describe how they impact a business's profitability.<br><br>● **Standard(s):** BIT.ACF.2.C.b.2 |

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| ● **BIT.DCM.1.C:** Design, edit, debug, and publish dynamic web pages and websites.<br>● **BIT.EC.1.A:** Use the economic decision-making model to determine how to allocate productive resources to meet the wants and needs of society<br>● **BIT.EC.1.B:** Differentiate between the methods that are used to allocate resources.<br>● **BIT.EC.2.B:** Describe how the economy can fluctuate based on spending and production decisions at the microeconomic and macroeconomic levels. | **6. Active Listening Skills**<br>● **Learning Target:** Students will describe the traits of an active listener and demonstrate these traits in classroom discussions and interactions with guest speakers.<br>● **Standard(s):** BIT.BC.1.A.b.1, BIT.BC.1.A.b.3<br>**7. Summarizing Discussions**<br>● **Learning Target:** Students will summarize classroom discussions accurately, focusing on key ideas and actionable outcomes.<br>● **Standard(s):** BIT.BC.1.A.b.2<br>**8. Following Spoken Directions**<br>● **Learning Target:** Students will follow spoken directions, demonstrating comprehension and attention to detail.<br>● **Standard(s):** BIT.BC.1.A.b.5<br>**9. Professional Communication (Email)**<br>● **Learning Target:** Students will create professional email communication to request or share information in a business context.<br>● **Standard(s):** BIT.BC.1.C.i.2<br>**10. Mobile Technologies for Communication**<br>● **Learning Target:** Students will recognize the multiple ways mobile technologies are used for both personal and professional communication in the modern business environment. |

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| | ● **Standard(s):** BIT.BC.1.C.b.3<br><br>**11. Collaboration through Technology**<br><br>● **Learning Target:** Students will collaborate with others through technology, such as shared documents and communication platforms, to acquire and share business-related information.<br><br>● **Standard(s):** BIT.BC.1.C.i.5<br><br>**12. Respect for Diversity and Collaboration**<br><br>● **Learning Target:** Students will demonstrate appropriate manners and etiquette when interacting with people from diverse backgrounds and collaborate effectively with peers and colleagues.<br><br>● **Standard(s):** BIT.BC.2.A.i.2, BIT.BC.2.A.b.5<br><br>**13. Meeting Participation and Leadership**<br><br>● **Learning Target:** Students will explain the importance of creating and sharing an agenda prior to a meeting and demonstrate leadership skills while working in group settings.<br><br>● **Standard(s):** BIT.BC.2.B.i.1, BIT.BC.2.B.i.2<br><br>**14. Writing Thank-You Notes**<br><br>● **Learning Target:** Students will write a professional thank-you note, demonstrating gratitude and professionalism in business communication.<br><br>● **Standard(s):** BIT.BC.3.B.b.1 |

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| | **15. Simple Presentation Skills**<br>● **Learning Target:** Students will create and deliver a simple presentation, utilizing clear communication and visual aids to convey information effectively.<br>● **Standard(s):** BIT.BC.3.B.b.5<br>**16. Professional Resume Creation**<br>● **Learning Target:** Students will outline the parts of a resume and understand the importance of each section in showcasing professional skills and experience.<br>● **Standard(s):** BIT.BC.5.A.b.2<br>**17. Job Search and Career Preparation**<br>● **Learning Target:** Students will identify online and print sources for locating job opportunities and preparing for a future career, including creating a list of potential job interview questions.<br>● **Standard(s):** BIT.BC.5.A.b.3, BIT.BC.5.A.b.4, BIT.BC.5.A.b.5<br>**18. Document and Publication Creation**<br>● **Learning Target:** Students will create documents and publications incorporating text, columns, graphics, and other design elements to communicate business information effectively.<br>● **Standard(s):** BIT.DCM.1.A.i.1<br>**19. Web Page Creation**<br>● **Learning Target:** Students will create |

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| | a basic web page using HTML5 section elements such as header, navigation, and footer to build a simple, functional site.<br><br>● **Standard(s):** BIT.DCM.1.C.i.1<br><br>**20. Basic Understanding of Economic Concepts**<br><br>● **Learning Target:** Students will describe the difference between a "want" and a "need," and recognize how goods and services are distributed and the impact of competition on prices.<br><br>● **Standard(s):** BIT.EC.1.A.b.1, BIT.EC.1.B.b.2, BIT.EC.4.B.b.2 |

**Supporting Standards:**

- **BIT.ACF.2.A.b.2:** Recognize items a business owns.
- **BIT.ACF.2.A.b.3:** Reconcile a bank statement.
- **BIT.ACF.2.B.b.2:** Define liabilities and identify various types.
- **BIT.ACF.2.C.b.1:** Define revenue.
- **BIT.ACF.2.C.b.2:** Define expense.
- **BIT.BC.1.A.b.1:** Describe traits of an active listener.
- **BIT.BC.1.A.b.2:** Summarize a classroom discussion.
- **BIT.BC.1.A.b.3:** Listen attentively to guest speakers.
- **BIT.BC.1.A.b.4:** Take simple notes.
- **BIT.BC.1.A.b.5:** Follow spoken directions.
- **BIT.BC.1.B.b.1:** Compose and speak simple responses to questions.
- **BIT.BC.1.B.b.2:** Identify word usage in a spoken or written sentence.
- **BIT.BC.1.C.i.2:** Create professional email communication to request or share information
- **BIT.BC.1.C.b.3:** Recognize the multiple ways that mobile technologies are used for both personal and professional communication.
- **BIT.BC.1.C.i.4:** Compose, deliver, and publish documents digitally.
- **BIT.BC.1.C.i.5:** Collaborate with others through technology to acquire and share information.
- **BIT.BC.1.D.b.5:** Read and follow directions.
- **BIT.BC.1.D.b.6:** Demonstrate reading comprehension through summarizing techniques.
- **BIT.BC.2.A.i.2:** Demonstrate appropriate manners and etiquette when interacting with people from diverse backgrounds.

- **BIT.BC.2.A.i.3:** Analyze situations in which communication can positively or negatively impact customer service.
- **BIT.BC.2.A.b.4:** Develop a respect and awareness of diversity
- **BIT.BC.2.A.b.5:** Demonstrate the ability to collaborate with peers and colleagues.
- **BIT.BC.2.A.b.6**: Respect the rights and acknowledge the opinions of others.
- **BIT.BC.2.A.b.7:** Recognize the value of a responsible social media presence.
- **BIT.BC.2.B.i.1:** Explain the importance of creating and sharing an agenda prior to a meeting.
- **BIT.BC.2.B.i.2:** Demonstrate leadership skills when working in a group.
- **BIT.BC.2.B.i.3:** Describe the importance of involving all meeting participants in any meeting setting.
- **BIT.BC.3.B.b.1:** Write a thank you note.
- **BIT.BC.3.B.b.5**: Create a simple presentation.
- **BIT.BC.3.B.i.7:** Recognize when a direct, indirect, or persuasive message is used.
- **BIT.BC.3.B.b.8:** Recognize the difference between a positive and a negative message.
- **BIT.BC.4.A.b.2:** Participate in group discussions and roleplaying.
- **BIT.BC.4.A.b.3:** Express needs and wants verbally.
- **BIT.BC.4.A.i.4:** Determine when more information is needed and ask a
- **BIT.BC.4.A.i.5:** Respond to questions directly and appropriately.
- **BIT.BC.4.B.b.7:** Be an active member at a group meeting.
- **BIT.BC.5.A.b.2:** Outline the parts of a resume.
- **BIT.BC.5.A.b.3:** Identify online and print sources to locate job opportunities.
- **BIT.BC.5.A.b.4:** Identify online sources to use for preparing for a future career.
- **BIT.BC.5.A.b.5:** Create a list of potential job interview questions.
- **BIT.BC.5.A.i.6:** Create a list of people who could be personal references.
- **BIT.BC.5.A.i.7:** Describe appropriate questions a potential employee could ask an interviewer.
- **BIT.DCM.1.A.i.1:** Create a document or publication incorporating text, columns, graphics, borders, and shading.
- **BIT.DCM.1.A.i.2:** Create publications using templates
- **BIT.DCM.1.B.i.1:** Import digital images, audio files, and video files into presentations.
- **BIT.DCM.1.B.b.2:** Prepare presentations for collaboration and distribution
- **BIT.DCM.1.C.i.1:** Create a basic web page using recommended HTML5 section elements: header, navigation, main, footer, etc.
- **BIT.DCM.1.C.b.2**: Create a basic website with links, images, and text using HTML
- **BIT.EC.1.A.b.1:** Describe the difference between a "want" and a "need
- **BIT.EC.1.B.b.2:** Recognize that goods and services are distributed using various methods.
- **BIT.EC.2.B.b.1:** Define “standard of living.”
- **BIT.EC.4.B.b.2:** Discuss the effect of competition on products and prices.

# High School Marketing & Business Education Curriculum

## MARKETING & BUSINESS EDUCATION

**MISSION STATEMENT**

The Marketing & Business Education Department will work with businesses, the community and other curricular areas to develop students into contributing members of society.

**BROAD GOALS**

The Marketing & Business Education Program will provide a comprehensive curriculum stressing goals consistent with the educational philosophy of the School District of Holmen through:

- Exploration of general store operations and entrepreneurial traits through the daily operation of the School Store and the model store experience.
- Exploration of opportunities in business and marketing, including those jobs created by new technology.
- An effective program of occupational instruction for secondary student's desired careers in marketing and business.
- Development of knowledge, attitudes, and skills that allows students to be educated consumers.
- Development of communication skills needed to be successful in everyday business activities.
- Course offerings for students who plan to enroll in programs requiring post-secondary education in the field of business and marketing.
- Allow students to explore how businesses market their goods and services globally.
- Apply information technology to achieve an organization's business goals.

- Develop leadership and teamwork abilities that will allow students to be successful in today's diverse workforce.

Marketing & Business Education will foster these traits through the use of contemporary curriculum, current technology, integrated and interdisciplinary efforts, and a variety of learning experiences. All classes are designed around the State Standards for Marketing Management, Entrepreneurship, Business, Information Technology, Career Readiness and align with the disciplinary literacy standards.

**COLLEGE CREDIT OPTION-TRANSCRIPTED CREDIT**

Western Technical College

College credit agreements are in place between Holmen High School and the Wisconsin Technical College System and UW system whereby a student will receive Wisconsin Technical College System credit for courses taken while in high school. There is no additional fee for these credits.

**Western Technical College Credit Opportunities for Marketing & Business Education Classes taken at HHS**

| HHS Class | Western Class and Credits Earned |
|---|---|
| Accounting S1 & S2 (TC) | Accounting Principles 1 (3 credits)<br>Accounting Principles 2 (3 credits) |
| Advanced Marketing S1 & S2 (TC) | Marketing Principles (3 credits) |
| Building Wealth (TC) | Personal Insurance, Taxes, & Estate Planning (1 credit)<br>Personal Investing (1 credit) |
| Computer Apps (TC)<br>(Required for class of 24'-26') | Software Applications for Business (3 credits) |
| Entrepreneurship (TC) | Project Management (3 credits) |
| Marketing & Business Concepts<br>S1 & S2 (TC) | Business Concepts (3 credits) |

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| Personal Finance (TC) | Personal Money Management & Loans (1 credit) |
| Retail Marketing (TC) | Quality Customer Service (3 credits) |
| Sports & Entertainment Marketing S1 & S2 (TC) | Selling Principles (3 credits) |

**Please note:** Students that earn a "C" or higher (on Western/CVTC's grading scale) AND complete all of the post secondary course competencies will earn both high school and college credit for the course. College credit earned is at no cost to the student.

**Certificates Available**

| **Western Certificate** | **HHS Courses Needed to Obtain** |
|---|---|
| Customer Service Representative Certificate | 1. Marketing & Business Concepts S1 & S2 (TC)<br>2. Entrepreneurship (TC) |
| Sales Fundamental Certificate | 1. Marketing & Business Concepts S1 & S2 (TC)<br>2. Computer Applications (TC)<br>3. Sports & Entertainment Marketing S1 & S2 (TC)<br>4. Entrepreneurship (TC) |

## MARKETING & BUSINESS EDUCATION

| **Course** | **Pre-Req/Notes** | **Credit** | **Grade Level** | | | |
|---|---|---|---|---|---|---|
| | | | **9** | **10** | **11** | **12** |
| **Required Courses** | | | | | | |
| Personal Finance (TC) | | .5 | | | R | |
| **Elective Courses** | | | | | | |
| Marketing & Business Concepts S1 & S2 (TC) | | 1 | E | E | | |
| Computer Apps (TC) (Required for class of 24'-26') | | .5 | E | E | E | E |

| | | | | | | |
|---|---|---|---|---|---|---|
| Retail Marketing | Offered 3rd Hour only | .5 | E | E | E | E |
| Web Design | | .5 | E | E | E | E |
| Advanced Marketing S1 & S2 (TC) | Yes | 1 | | E | E | E |
| Market Research | Yes/Offered Fall Only | .5 | | E | E | E |
| Accounting S1 & S2 (TC) | | 1 | | | E | E |
| Building Wealth (TC) | Yes | .5 | | | E | E |
| Sports & Entertainment Marketing S1 & S2 (TC) | Yes | 1 | | | E | E |
| Youth Apprenticeship: Finance | Meet the criteria of the application. | 2 | | | E | E |
| Youth Apprenticeship: Business Administration | Meet the criteria of the application. | 2 | | | E | E |
| Youth Apprenticeship: Marketing | Meet the criteria of the application. | 2 | | | E | E |
| Entrepreneurship (TC) | Yes/Offered Fall Only | .5 | | | | E |
| Capstone: Marketing & Business | Meet the criteria of the application. | .5 or 1 | | | | E |

TC = Transcripted Credit; R=Required course and year to be taken; E=Elective and the year student is eligible to take the course;

# High School Marketing Curriculum

## Advanced Marketing Curriculum

(1 credit) Updated: February 2025

| **Unit:** Product Service Management | **Duration:** 12 Weeks |
|---|---|
| **Unit Objectives (overarching objectives):**<br><br>By the end of the product service management unit students will be able to create a marketing mix using the 4 p's of marketing and create a tangible product along with a products package. Students will understand the concept of target market and how they develop products to meet the needs of their target market. | |
| **Priority Standards:**<br><br>**MME.EXP.1:** Marketing Mix Students will review, utilize, and/or develop the four areas of the marketing mix as they relate to the given industry.<br><br>**MME.MKT.2:** Marketing Functions/Market Planning Students will analyze target marketing concepts and strategies utilized to select and determine an audience for a product or business.<br><br>**MME.MKT.3:** Marketing Functions/Marketing Information Management Students will describe the concepts, systems, and tools needed to gather, access, synthesize, evaluate, and disseminate information for use in making business decisions.<br><br>**MME.MKT.4:** Marketing Functions/Product Service Management Students will analyze the concepts and processes needed to obtain, develop, maintain, and improve a product mix in response to market opportunities and plan product or business management activities to facilitate product | **Learning Targets:**<br><br>Students can identify and practice the 4 parts of the marketing mix: product, price, place, promotion.<br><br>Students will create a new product and develop a hypothetical plan to launch that product into the marketplace.<br><br>Students can identify pricing strategies in order to price the product they create.<br><br>Students can identify promotional strategies used by a business and will create samples for their hypothetical product launch.<br><br>Students can identify a feature and the benefit that is given by that feature.<br><br>Students can describe a target market and break it down by the 5 factors: demographics, psychographics, socioeconomic, geographics, economics.<br><br>Students can break down a market segment and identify factors that affect that segment. |

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| development.<br><br>**MME.MKT.5:** Marketing Functions/Pricing Students will apply concepts and strategies used in determining, calculating, and adjusting prices to maximize return and meet customers' perceptions of value. | Students will create a survey method, give a survey, and analyze data.<br><br>Students will create a survey method, give a survey, and analyze data.<br><br>Students can collect primary and secondary data and analyze that data in order to make important business decisions.<br><br>Students can identify the product life cycle and explain the stages of the life cycle and provide examples of businesses that are in each stage of the life cycle.<br><br>Students understand and can identify pricing strategies utilized in perceived value. |
| **Supporting Standards:**<br><br>**WCRS.LRN.1:** Academic Skills – Acquire academic skills and real-life experiences to prepare for future education and a career. | |

| **Unit:** Promotion | **Duration:** 18 Weeks |
|---|---|
| **Unit Objectives (overarching objectives):**<br><br>By the end of this unit students will have created an entire promotional plan for a business and will be presenting it to a panel of judges. A promotion will be selected to be implemented by that business. Students will have a variety of business people in to help reinforce concepts that are being taught in the classroom setting. | |
| **Priority Standards:**<br><br>**MME.MKT.8:** Marketing Functions/Promotion Students will describe the concepts and strategies needed to communicate information about the company, product(s), and idea(s) to achieve a desired outcome. | **Learning Targets:**<br><br>Students can describe promotional methods and channels in order to reach the target market.<br><br>Students will develop promotional pieces |

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| **MME.EXP.1:** Marketing Mix Students will review, utilize, and/or develop the four areas of the marketing mix as they relate to the given industry. | using the 4 parts of the promotional mix for their promotional plan.<br><br>Students can create an entire promotional campaign for the local credit union located inside of the HHS School store. Students will present their promotional campaign to a panel of judges at the district office.<br><br>Students will create a professional business presentation to present their campaigns. |
| **Supporting Standards:**<br><br>**WCRS.LRN.3:** Innovation mindset and skills – Develop a spirit of innovation and creativity that encourages educational risk-taking, acceptance of failure, and learning from mistakes in pursuit of achieving a goal.<br><br>**WCRS.LRN.2:** Critical thinking and problem-solving – Develop the motivation and acquire the critical thinking and creative problem-solving skills needed to prepare for future education and careers. | |

| **Unit:** International Marketing | **Duration:** 6 Weeks |
|---|---|
| **Unit Objectives (overarching objectives):**<br><br>By the end of the unit students will understand how marketing affects the global economy. Students can identify multinational corporations along with having an understanding of cultural differences and how that can affect the business world. Students will have an understanding of how small businesses operate within our economy. | |
| **Priority Standards:**<br><br>**MME.EXP.2:** Economics Students will analyze how an economy functions and how resources are allocated in society.<br><br>**MME.ECON.5:** Economic Operations Students will correlate the inverse or linear relationships of market structures, business | **Learning Targets:**<br><br>Students can identify how resources are allocated in other countries and understand how marketing affects the global economy.<br><br>Students can differentiate between a need and a want and how it affects the market place. |

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| models. | Students can identify the difference between a multinational corporation and a domestic corporation.<br><br>Students can explain what a market economy is and how small businesses fit into our economy. |
| **Supporting Standards:**<br><br>**WCRS.LIF.3:** Global competence – Understand one's impact on the world and develop the ability to interact with people from other backgrounds, nations, and cultures. | |

## Entrepreneurship Curriculum

(.5 credit) Updated: February 2025

| **Unit:** Introduction to Entrepreneurship | **Duration:** 4 Weeks |
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| **Unit Objectives (overarching objectives):**<br><br>By the end of this unit students will understand the forms of business ownership and be able to identify the differences between each form of ownership and come up with strengths and weaknesses of each of the forms of ownership. Students will understand entrepreneurial concepts. | |
| **Priority Standards:**<br><br>**MME.ENT.1:** Entrepreneurship Students will describe the concepts and processes associated with successful entrepreneurial performance.<br><br>**MME.ENT.2:** Entrepreneurship Students will describe the concepts, processes, and skills associated with identifying new ideas, opportunities, and methods with creating or starting a new project or venture. | **Learning Targets:**<br><br>Students will be able to identify characteristics of an entrepreneur.<br><br>Students will learn from industry experts and local entrepreneurs by having them as guest presenters and visiting small businesses as a field trip site.<br><br>Students will identify and start brainstorming ideas for their new business venture. (Model |

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| | Store-HHS School Holiday Store) |
| **Supporting Standards:**<br><br>**WCRS.CAR.1:** Career Awareness (KNOW) – KNOW how interests, skills, and strengths connect learning to career opportunities in their future. | |

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| **Unit:** Human Resource Management | **Duration:** 2 Weeks |
| **Unit Objectives (overarching objectives):**<br><br>By the end of this unit students will be able to identify what a human resource manager does, prepare a schedule, create employee personnel files, create employee handbook policies, employee dress codes, and overall guidelines. | |
| **Priority Standards:**<br><br>**MME.ENT.9:** Human Resource Management Students will distinguish the tools, techniques, and systems that businesses use to plan, staff, lead, and organize human resources. | **Learning Targets:**<br><br>Students will learn what human resource management is in order to eventually create HR documents for their store.<br><br>Students will learn how to create a schedule and will practice using a mock scheduling activity.<br><br>Students will analyze and create an employee handbook which will outline guidelines, dress codes, etc.<br><br>Students will vote on a dress code and create a uniform for their store.<br><br>Students will learn about vision and mission statements and the class will create a vision and mission statement for their store. |
| **Supporting Standards:**<br><br>**WCRS.LIF.4:** Responsive leadership – Take individual and collective action that demonstrates responsibility, care, and purpose to create positive change. | |

**WCRS.LRN.2:** Critical thinking and problem-solving – Develop the motivation and acquire the critical thinking and creative problem-solving skills needed to prepare for future education and careers.

| **Unit:** Marketing Planning/Operations | **Duration:** 2 Weeks |
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| **Unit Objectives (overarching objectives):**<br><br>By the end of this unit students will have identified their target market for their store and will start to develop a market plan along with daily operational set-up. Students will have an understanding of how to utilize and plan for financial resources within their store. | |
| **Priority Standards:**<br><br>**MME.ENT.3:** Marketing Mix Students will review, utilize, and develop the four areas of the marketing mix as they relate to the given industry.<br><br>**MME.ENT.4:** Financial Analysis Students will understand tools, strategies, and systems used to maintain, monitor, control, and plan the use of financial resources.<br><br>**MME.ENT.5:** Market Planning Students will analyze the concepts and strategies utilized to determine target marketing strategies for a select audience.<br><br>**MME.ENT.6:** Operations Students will execute the processes and systems implemented to monitor, plan, and control the day-to-day activities required for continued business functioning. | **Learning Targets:**<br><br>Students will identify and create marketing strategies around the marketing mix for their holiday store.<br><br>Students will learn how to use the square system to track financial data and record sales. Students will develop an inventory method that will work with the square system.<br><br>Students will create different marketing pieces to advertise and promote to their target market and selected audiences. |
| **Supporting Standards:**<br><br>**WCRS.LRN.4:** Technology skills – Acquire commonly used technology skills required for all careers. | |

<table>
<tr><td>Unit: Project Management</td><td>Duration: 10 Weeks</td></tr>
<tr><td colspan="2">Unit Objectives (overarching objectives):<br><br>By the end of this unit students will have successfully opened up and operated a model store. Students will select a recipient for their store and will develop, operate, and manage a model store project. Students will also select a charity recipient and raise money through business sponsorships and vendors for their model store project.</td></tr>
<tr><td>Priority Standards:<br><br>Standard: MME.ENT.10: Project Management and Strategic Management Students will describe tools, techniques, and systems that are used to plan, implement, monitor, and evaluate business projects.</td><td>Learning Targets:<br><br>Students will be broken up into departments and will have specific tasks to work on to create a model store project: Sales, Human Resource, Interactive Media, Promotion, Operations, Management<br><br>Students self select departments based on career interest; each department focuses on the following objectives/learning targets.<br><br>Students collaborate and share outcomes from each department so all students get exposure/ input in each area.<br><br>Sales: Students will secure vendors/ sponsorships.<br><br>Human Resource: Students will create personnel files, employee incentives, handbook, schedule, store hours, uniforms, HR policies, etc.<br><br>Interactive Media: Students will use and create various forms of social media marketing to promote their store in addition to assisting the promotion department with the grand opening ceremony.<br><br>Promotion: Students will create an entire promotional campaign, secure media, new interviews, flyers, and plan an entire grand opening ceremony and event with community members.</td></tr>
</table>

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| | Operations: Students will create an inventory system, set up an online Holmen apparel store, and mark/price/code merchandise along with creating vendor consignment contracts and arranging for vendor pick up and drop off.<br><br>Management: Students will oversee the operations of all departments and facilitate department manager meetings, class discussions, and help each department complete any necessary tasks. |
| **Supporting Standards:**<br><br>**WCRS.LRN.3:** Innovation mindset and skills – Develop a spirit of innovation and creativity that encourages educational risk-taking, acceptance of failure, and learning from mistakes in pursuit of achieving a goal.<br><br>**WCRS.LIF.2:** Interpersonal communication and collaboration – Use interpersonal skills to interact with others for positive outcomes and collective success. | |

## Market Research Curriculum

(.5 credit) Updated: February 2025

| **Unit:** Introduction to Market Research | **Duration:** 8 Weeks |
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| **Unit Objectives (overarching objectives):**<br><br>Students will learn the types of research methods and will create market research to analyze for a retail business. Students will conduct research on the business they are using for their DECA market research written project. | |
| **Priority Standards:**<br><br>**MME.RMGT.1:** Students will review, utilize, and/or develop the four areas of the marketing mix as they relate to the retail | **Learning Targets:**<br><br>Students will learn about primary and secondary data and how to conduct market research through creating surveys, focus |

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| industry.<br><br>**MME.RMGT.6:** Students will describe the concepts, systems, and tools needed to gather, access, synthesize, evaluate, and disseminate information for use in making business decisions.<br><br>**MME.MGT.2:** Students will use tools, strategies, and systems needed to access, collect, process, maintain, analyze, evaluate, and disseminate information to assist in business decision-making. | groups, and observations.<br><br>Students will analyze data they have collected and learn how to chart and map out the research findings to apply in their DECA project.<br><br>Students will use their research data to brainstorm ideas for their marketing plan for the DECA research operations event.<br><br>Students will conduct a SWOT analysis for their business plan project. |
| **Supporting Standards:**<br><br>**WCRS.LRN.2:** Critical thinking and problem-solving – Develop the motivation and acquire the critical thinking and creative problem-solving skills needed to prepare for future education and careers. | |

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| **Unit:** Marketing Plan | **Duration:** 8 Weeks |
| **Unit Objectives (overarching objectives):**<br><br>Students will develop a strategic marketing plan following the DECA guidelines which will result in a 20 page written project based on their findings and conclusions of their research. | |
| **Priority Standards:**<br><br>**MME.MKT.9:** Students will describe the techniques and strategies used to foster positive, ongoing relationships with customers.<br><br>**MME.RMGT.4:** Students will explore the concepts and actions needed to determine client needs and wants and respond through planned, personalized communication that influences purchase decisions and enhances future business opportunities. | **Learning Targets:**<br><br>Students will develop a marketing plan based on an assigned topic to appeal to their customer base.<br><br>Students will learn how to use their market research to determine customer needs and wants in order to enhance their assigned business.<br><br>Students will develop a budget for their marketing plan. |

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| **MME.MKT.6:** Students will understand tools, strategies, and systems used to maintain, monitor, control, and plan the use of financial resources.<br><br>**MME.DMKT.6:** Students will evaluate the long-term and short-term results of promotional efforts.<br><br>**MME.MKT.4:** Students will analyze the concepts and processes needed to obtain, develop, maintain, and improve a product mix in response to market opportunities and plan product or business management activities to facilitate product development. | Students will set long term and short term goals along with a list of activities and timelines for their assigned business. |
| **Supporting Standards:**<br><br>**WCRS.LRN.1:** Academic Skills – Acquire academic skills and real-life experiences to prepare for future education and a career.<br><br>**WCRS.LRN.3:** Innovation mindset and skills – Develop a spirit of innovation and creativity that encourages educational risk-taking, acceptance of failure, and learning from mistakes in pursuit of achieving a goal.<br><br>**WCRS.LIF.2:** Interpersonal communication and collaboration – Use interpersonal skills to interact with others for positive outcomes and collective success.<br><br>**WCRS.LIF.1:** Self-awareness, management, and responsibility – Gain insight into oneself to help inform and build paths to success in personal, educational, and career settings. | |

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| **Unit:** Research Findings & Presentation | **Duration:** 4 Weeks |
| **Unit Objectives (overarching objectives):**<br><br>Students will put together a formal presentation to present to a panel of judges (local business members of the community). We will follow the DECA project rubric for the business operations research projects. | |

| Priority Standards: | Learning Targets: |
|---|---|
| **MME.MGT.6:** Students will use the systems, strategies, and techniques used to collect, organize, analyze, and share information known in an organization. | Students will put together a professional presentation to present to business people on their research findings and conclusions and proposed strategic plan. |
| **Supporting Standards:**<br><br>**WCRS.LRN.2:** Critical thinking and problem-solving – Develop the motivation and acquire the critical thinking and creative problem-solving skills needed to prepare for future education and careers.<br><br>**WCRS.LIF.2:** Interpersonal communication and collaboration – Use interpersonal skills to interact with others for positive outcomes and collective success. | |

Review and Decide On:

**Writing Standards for Literacy**

Write arguments focused on discipline specific content

Conduct short as well as more sustained research projects to answer questions or solve problems

**Speaking and Listening Standards**

Present claims and findings

Integrate multimedia and visual displays

**Math Standards**

Make sense of problems and persevere in solving them

## Market and Business Concepts Curriculum

(1 credit) Updated: February 2025

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| **Unit:** Class Introduction/ DECA | **Duration:** 5.5 Weeks |

**Unit Objectives (overarching objectives):**

Students will be exposed to all areas of our course and will identify course expectations. Students will be introduced to the link between our curricular area and co-curricular students organization. Students will be introduced to the opportunities that the co-curricular organization, DECA, provides to them.

**Priority Standards:**

**WCRS.CAR.1:** Career Awareness- (KNOW)- KNOW how interests, skills, and strengths connect learning to career opportunities in their future.

**WCRS.LRN.1:** Academic Skills- Acquire academic skills and real-life experiences to prepare for future education and a career.

**MME.MKT.8:** Marketing Functions/Promotion- Students will describe the concepts and strategies needed to communicate information about the company, product(s), and idea(s) to achieve a desired outcome.

**Learning Targets:**

- Identify specifics about my class and classmates.
- Identify expectations for the workplace and classroom.
- Explain key components of quality advertisement.
- Create an advertisement.
- Share information about myself in a presentation with classmates.
- Identify activities I can do related to Professional Point standards aligned components.
- Explain historical components of DECA.
- Identify and reflect on opportunities in the student organization, DECA.
- Explain a professional organization/ student organization and how it benefits them
- Identify competitive events that fit my interests and skills.
- Communicate the benefits to joining a student organization/ professional organization.
- Analyze a DECA role play.
- Analyze performance indicators and an event scenario for a role play.
- Complete a sample DECA test.

**Supporting Standards:**

**WCRS.LRN.4:** Technology skills- Acquire commonly used technology skills required for all careers.

| **Unit:** Time Management/ Goal Setting | **Duration:** 2.5 Weeks |
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| **Unit Objectives (overarching objectives):**<br><br>Students will be exposed to the concepts of time management and analyze their strengths and weaknesses to time management while seeing the impact time management has in a marketing/ business setting. Students will explore the goal setting process, set goals for themselves and see the impact that goal setting has in personal and professional settings. | |
| **Priority Standards:**<br><br>**WCRS.LRN.1:** Academic Skills- Acquire academic skills and real-life experiences to prepare for future education and a career.<br><br>**WCRS.LIF.1:** Self-awareness, management, and responsibility- Gain insight into oneself to help inform and build paths to success in personal, educational, and career settings.<br><br>**Standard MME.EXP.5:** Students will distinguish the tools, techniques, and systems that businesses use in management.<br><br>**MME.MGT.8:** Students will understand techniques, strategies, and systems used to foster self-understanding and enhance relationships with others.<br><br>**WCRS.LRN.3:** Innovation mindset and skills – Develop a spirit of innovation and creativity that encourages educational risk-taking, acceptance of failure, and learning from mistakes in pursuit of achieving a goal. | **Learning Targets:**<br><br>● Explain time management.<br>● Identify benefits of time management.<br>● Brainstorm strategies for time management.<br>● Analyze and reflect on how you spend your time.<br>● Identify ways to Improve time management<br>● Illustrate categories of late people.<br>● Research and reflect on current business topics.<br>● Define a goal.<br>● Identify benefits of goal setting.<br>● Explain the components of a SMART goal.<br>● Write a SMART goal.<br>● Analyze goals for the SMART format.<br>● Differentiate between short and long term goals.<br>● Identify goals you have for your life. |
| **Supporting Standards:**<br><br>**WCRS.CAR.1:** Career Awareness- (KNOW)- KNOW how interests, skills, and strengths connect learning to career opportunities in their future. | |

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| **WCRS.LRN.4:** Technology skills- Acquire commonly used technology skills required for all careers. |

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| **Unit:** Team Building & Communication | **Duration:** 2.5 Weeks |
| **Unit Objectives (overarching objectives):**<br><br>Students will identify how teamwork and teambuilding impact professional situations. Students will identify the components of the teambuilding process and work within them to accomplish team goals. Students will be able to explain verbal and nonverbal communication and positive communication strategies. Students will apply communication skills and explain how communication impacts personal and professional success. | |
| **Priority Standards:**<br><br>**WCRS.LRN.1:** Academic Skills- Acquire academic skills and real-life experiences to prepare for future education and a career.<br><br>**MME.MGT.8:** Students will understand techniques, strategies, and systems used to foster self-understanding and enhance relationships with others.<br><br>**WCRS.LIF.4:** Responsive leadership – Take individual and collective action that demonstrates responsibility, care, and purpose to create positive change.<br><br>**WCRS.LIF.2:** Interpersonal communication and collaboration – Use interpersonal skills to interact with others for positive outcomes and collective success. | **Learning Targets:**<br><br>● Identify the components of the team building process.<br>● Work in a team.<br>● Identify the benefits of team building.<br>● Collaborate with others.<br>● Solicit feedback.<br>● Use collaboration and feedback to come to a consensus.<br>● Explain the nature of effective communication.<br>● Identify components of effective communication.<br>● Demonstrate effective communication. |
| **Supporting Standards:** | |

**Standard: WCRS.LIF.1:** Self-awareness, management, and responsibility- Gain insight into oneself to help inform and build paths to success in personal, educational, and career settings.

**WCRS.CAR.1:** Career Awareness- (KNOW)- KNOW how interests, skills, and strengths connect learning to career opportunities in their future.

| **Unit:** Career and Employability Skills and Research (Motivation/ Employability Skills/ SWOT Analysis/ Career Research) | **Duration:** 4 Weeks |
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**Unit Objectives (overarching objectives):**

Students will explore the concepts of motivation, identify employability skills beneficial in all careers, and learn about and utilize the tool of a SWOT analysis. After that, students will select a career of interest to complete research related to the educational and professional advancement, career demand, wages, and apply the concepts of motivation, employability skills and a SWOT analysis to that career.

| **Priority Standards:** | **Learning Targets:** |
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| **WCRS.CAR.2:** Career Exploration (EXPLORE) – EXPLORE multiple career and educational choices to evaluate how they compare and contrast to personal interests and skills.<br><br>**Standard: WCRS.LIF.1:** Self-awareness, management, and responsibility- Gain insight into oneself to help inform and build paths to success in personal, educational, and career settings.<br><br>**MME.MGT.8:** Students will understand techniques, strategies, and systems used to foster self-understanding and enhance relationships with others. | ● Identify types of motivation.<br>● Explain the difference between intrinsic and extrinsic motivation.<br>● Identify the impact of motivation on personal and professional success.<br>● Explain employability skills.<br>● Identify employability skills.<br>● Explain the impact of employability skills on career success.<br>● Explain the components of a SWOT analysis and when to utilize one.<br>● Complete a SWOT analysis for a business.<br>● Complete a SWOT analysis related to personal attainment.<br>● Research a career of interest.<br>● Apply the concepts of motivation, employability skills and SWOT |

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| | analysis to a chosen career. |

**Supporting Standards:**

**MME.ENT.5:** Students will analyze the concepts and strategies utilized to determine target marketing strategies for a select audience.

**WCRS.CAR.1:** Career Awareness- (KNOW)- KNOW how interests, skills, and strengths connect learning to career opportunities in their future.

**WCRS.LRN.1:** Academic Skills- Acquire academic skills and real-life experiences to prepare for future education and a career.

**WCRS.LRN.2:** Critical thinking and problem-solving – Develop the motivation and acquire the critical thinking and creative problem-solving skills needed to prepare for future education and careers.

| **Unit:** Professional Etiquette (Professional Dress/ Dining Etiquette) | **Duration:** 4 Weeks |
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**Unit Objectives (overarching objectives):**

Students will identify professional etiquette and expectations to be used in professional settings by focusing on professional dress and types of dress expected in various situations as well as professional expectations related to dining etiquette.

| **Priority Standards:** | **Learning Targets:** |
|---|---|
| **MME.ENT.9:** Students will distinguish the tools, techniques, and systems that businesses use to plan, staff, lead, and organize human resources.<br><br>**WCRS.CAR.1:** Career Awareness (KNOW) – KNOW how interests, skills, and strengths connect learning to career opportunities in their future.<br><br>**WCRS.LRN.1:** Academic Skills – Acquire academic skills and real-life experiences to | ● Identify the types of dress (business formal, business professional, business casual, casual) and the situations in which they are appropriate.<br>● Analyze how dress impacts perceptions in personal and professional settings.<br>● Explain how a first impression impacts professional success.<br>● Understand the attire expectations for the job seeking process. |

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| prepare for future education and a career. | ● Create business professional dress outfits.<br>● Identify the situations in which dining etiquette would be required.<br>● Explain dining etiquette rules and expectations.<br>● Analyze how dining etiquette is similar/ different in other countries/ cultures |
| **Supporting Standards:** | |

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| **Unit:** Introduction to Business (Business Types, Functions and Characteristics) | **Duration:** 3 Weeks |
| **Unit Objectives (overarching objectives):** | |
| **Priority Standards:**<br><br>**MME.EXP.2:** Students will analyze how an economy functions and how resources are allocated in society.<br><br>**MME.EXP.4:** Students will execute the processes and systems implemented to monitor, plan, and control the day-to-day activities required for continued business function.<br><br>**Standard MME.EXP.5:** Students will distinguish the tools, techniques, and systems that businesses use in management.<br><br>**Standard MME.EXP.6:** Students will understand tools, strategies, and systems to maintain, monitor, control, and plan the use of financial resources. | **Learning Targets:**<br><br>● Define business.<br>● Explain the 3 types of businesses.<br>● Identify characteristics of business.<br>● Define ecommerce.<br>● Explore the functions of business (production, marketing, finance, management) and their impact. |

**Supporting Standards:**

**WCRS.CAR.1:** Career Awareness (KNOW) – KNOW how interests, skills, and strengths connect learning to career opportunities in their future.

**WCRS.CAR.2:** Career Exploration (EXPLORE) – EXPLORE multiple career and educational choices to evaluate how they compare and contrast to personal interests and skills.

**WCRS.LRN.1:** Academic Skills – Acquire academic skills and real-life experiences to prepare for future education and a career.

| **Unit:** Introduction to Marketing | **Duration:** 5 Weeks |
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| **Unit Objectives (overarching objectives):**<br><br>Students will explore the world of marketing including the functions and foundations of marketing, the marketing concept, marketing mix and target market. | |
| **Priority Standards:**<br><br>**Standard MME.EXP.1:** Students will review, utilize, and/or develop the four areas of the marketing mix as they relate to the given industry.<br><br>**Standard MME.EXP.2:** Students will analyze how an economy functions and how resources are allocated in society.<br><br>**Standard MME.MKT.2:** Students will analyze target marketing concepts and strategies utilized to select and determine an audience for a product or business. | **Learning Targets:**<br><br>● Identify the difference between needs and wants.<br>● Explain the marketplace.<br>● Explain the difference between a customer and consumer.<br>● Identify the motivation of a buyer and seller in the marketplace.<br>● Define the marketing concept.<br>● Define the marketing mix.<br>● Explain 4 components of the marketing mix.<br>● Explain a target market.<br>● Identify a target market based on the various market segmentation components.<br>● Explain the marketing functions.<br>● Identify the marketing foundations. |
| **Supporting Standards:** | |

**WCRS.CAR.1:** Career Awareness (KNOW) – KNOW how interests, skills, and strengths connect learning to career opportunities in their future.

**WCRS.CAR.2:** Career Exploration (EXPLORE) – EXPLORE multiple career and educational choices to evaluate how they compare and contrast to personal interests and skills.

**WCRS.LRN.1:** Academic Skills – Acquire academic skills and real-life experiences to prepare for future education and a career.

**Standard MME.MKT.3:** Students will describe the concepts, systems, and tools needed to gather, access, synthesize, evaluate, and disseminate information for use in making business decisions.

**Standard MME.MKT.4:** Students will analyze the concepts and processes needed to obtain, develop, maintain, and improve a product mix in response to market opportunities and plan product or business management activities to facilitate product development.

**Standard MME.MKT.5:** Students will apply concepts and strategies used in determining, calculating, and adjusting prices to maximize return and meet customers' perceptions of value.

**Standard MME.MKT.6:** Students will understand tools, strategies, and systems used to maintain, monitor, control, and plan the use of financial resources.

**Standard MME.MKT.7:** Students will evaluate the role of channel management/distribution in business and illustrate how products and services are transported to the ultimate consumer.

**Standard MME.MKT.8:** Students will describe the concepts and strategies needed to communicate information about the company, product(s), and idea(s) to achieve a desired outcome.

**Standard MME.MKT.9:** Students will describe the techniques and strategies used to foster positive, ongoing relationships with customers.

| **Unit:** Introduction to Entrepreneurship | **Duration:** 4 Weeks |
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| **Unit Objectives (overarching objectives):**<br><br>Standard MME.EXP.3 Students will describe the concepts and processes associated with successful entrepreneurial performance. | |

| **Priority Standards:**<br><br>**Standard MME.EXP.3:** Students will describe the concepts and processes associated with successful entrepreneurial performance. | **Learning Targets:**<br><br>● Define the concept of entrepreneurship<br>● Describe the goals of entrepreneurship and its impact on the economy<br>● Identify and Research the impact of past successful entrepreneurs on our economy<br>● Explain and describe desirable skills and personality skills needed for entrepreneurial success.<br>● Identify entrepreneurs in the economy. |
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| **Supporting Standards:**<br><br>**WCRS.CAR.1:** Career Awareness (KNOW) – KNOW how interests, skills, and strengths connect learning to career opportunities in their future.<br><br>**WCRS.CAR.2:** Career Exploration (EXPLORE) – EXPLORE multiple career and educational choices to evaluate how they compare and contrast to personal interests and skills.<br><br>**WCRS.LRN.1:** Academic Skills – Acquire academic skills and real-life experiences to prepare for future education and a career. | |

| **Unit:** Sales | **Duration:** 6 Weeks |
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| **Unit Objectives (overarching objectives):**<br><br>Students will explore the impact of sales on successful business operations. Students will learn and apply the seven steps of the sales process to sell a product to a customer. | |
| **Priority Standards:**<br><br>**MME.MKT.9:** Students will describe the techniques and strategies used to foster positive, ongoing relationships with customers. | **Learning Targets:**<br><br>● Foster positive relationships with customers to enhance company image and build sales.<br>● Perform presales activities to facilitate sales presentations. |

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| | ● Approach a potential customer/client utilizing identified approach methods during a sales presentation.<br>● Utilize the concepts and actions needed to determine client wants and needs, and respond through planned, personalized communication that influences purchase decisions and enhances future business opportunities in a sales presentation.<br>● Utilize the concepts and actions needed to determine client wants and needs, and respond through planned, personalized communication that influences purchase decisions and enhances future business opportunities in a sales presentation.<br>● Handle customer/client complaints and objections or questions using identified methods.<br>● Close the sale by asking the customer/client to make a purchase or commit to the next steps.<br>● Increase the value of the sale and improve customer satisfaction by suggestion selling additional products or services that may be of interest to the customer.<br>● Conduct post-sales follow-up activities to foster ongoing relationships with customers. |

**Supporting Standards:**

**WCRS.CAR.1:** Career Awareness (KNOW) – KNOW how interests, skills, and strengths connect learning to career opportunities in their future.

**WCRS.CAR.2:** Career Exploration (EXPLORE) – EXPLORE multiple career and educational choices to evaluate how they compare and contrast to personal interests and skills.

**WCRS.LRN.1:** Academic Skills – Acquire academic skills and real-life experiences to prepare for future education and a career.

## Retail Marketing Curriculum

(.5 credit) Updated: February 2025

| **Unit:** Introduction to Retail | **Duration:** 4 Weeks |
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| **Unit Objectives (overarching objectives):**<br><br>By the end of this unit students will understand the marketing mix and how it applies to retail along with exploring retailers and understanding how a target market affects a retailer from a marketing perspective. Students will compare and contrast marketing mix strategies by analyzing a retailer. | |
| **Priority Standards:**<br><br>**MME.RMGT.1:** Students will review, utilize, and/or develop the four areas of the marketing mix as they relate to the retail industry.<br><br>**MME.RMGT.2:** Students will analyze target marketing concepts and strategies utilized to select and determine an audience for a product, service, or business. | **Learning Targets:**<br><br>Students will learn the components of the marketing mix and be able to identify them using retailers.<br><br>Students will analyze a target market and develop a new product mix for the Maroon Mug (School Based Enterprise). |
| **Supporting Standards:**<br><br>**WCRS.CAR.2:** Career Exploration (EXPLORE) – EXPLORE multiple career and educational choices to evaluate how they compare and contrast to personal interests and skills.<br><br>**WCRS.LRN.1:** Academic Skills – Acquire academic skills and real-life experiences to prepare for future education and a career. | |

| **Unit:** Product Development/Promotion | **Duration:** 2 Weeks |
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| **Unit Objectives (overarching objectives):**<br><br>By the end of this until students will be able to develop a new product and advertising and promotional components to carry out their campaign. | |

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| **Priority Standards:**<br><br>**MME.RMGT.1:** Students will review, utilize, and/or develop the four areas of the marketing mix as they relate to the retail industry.<br><br>**MME.RMGT.2:** Students will analyze target marketing concepts and strategies utilized to select and determine an audience for a product, service, or business.<br><br>**MME.RMGT.4:** Students will explore the concepts and actions needed to determine client needs and wants and respond through planned, personalized communication that influences purchase decisions and enhances future business opportunities.<br><br>**MME.RMGT.8:** Students will analyze the concepts and processes needed to obtain, develop, maintain, and improve a product or service mix in response to market opportunities. | **Learning Targets:**<br><br>Students will implement a new product and or service into the school based enterprise.<br><br>Students will develop a new product line to implement and promote to students in the school based enterprise (The Maroon Mug).<br><br>Students will conduct market research with the student body to determine product line and feasibility.<br><br>Students will develop a promotional campaign to launch their new product in The Maroon Mug. |
| **Supporting Standards:**<br><br>**MME.RMGT.6:** Students will describe the concepts, systems, and tools needed to gather, access, synthesize, evaluate, and disseminate information for use in making business decisions. | |

| **Unit:** Human Resources | **Duration:** 2 Weeks |
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| **Unit Objectives (overarching objectives):**<br><br>Students will create an employee handbook by analyzing other employee handbooks and using similar businesses to model a handbook that fits the needs and wants of the employees of the school based enterprise. | |

| **Priority Standards:**<br><br>**MME.ENT.9:** Students will distinguish the tools, techniques, and systems that businesses use to plan, staff, lead, and organize human resources. | **Learning Targets:**<br><br>Students will demonstrate human resource concepts by analyzing and researching other companies and school based enterprises.<br><br>Students will demonstrate they understand workplace compliance, policies, dress code, rule infractions, mission statements, performance evaluations, grievances, benefits, and company background through the creation of an employee handbook for the school based enterprise (The Maroon Mug). |
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| **Supporting Standards:**<br><br>**WCRS.LIF.2:** Interpersonal communication and collaboration – Use interpersonal skills to interact with others for positive outcomes and collective success.<br><br>**WCRS.LIF.4:** Responsive leadership – Take individual and collective action that demonstrates responsibility, care, and purpose to create positive change. | |

| **Unit:** Sales | **Duration:** 2 Weeks |
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| **Unit Objectives (overarching objectives):**<br><br>Students will be able to identify and utilize the 7 steps of the sales process while showcasing their knowledge in the school based enterprise. | |
| **Priority Standards:**<br><br>**MME.RMGT.4:** Students will explore the concepts and actions needed to determine client needs and wants and respond through planned, personalized communication that influences purchase decisions and enhances future business opportunities.<br><br>**MME.RMGT.3:** Students will describe the techniques and strategies used to foster | **Learning Targets:**<br><br>Students will complete an infomercial demonstrating they understand and can demonstrate the 7 steps of the sale.<br><br>Students will learn proper sales strategies to have positive customer service strategies to implement in the school based enterprise. |

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| positive, ongoing relationships with customers. | |
| **Supporting Standards:**<br><br>**WCRS.LIF.3:** Global competence – Understand one's impact on the world and develop the ability to interact with people from other backgrounds, nations, and cultures. | |

| **Unit:** Customer Service | **Duration:** 3 Weeks |
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| **Unit Objectives (overarching objectives):**<br><br>Students will learn customer service strategies and apply them to the school based enterprise (The Maroon Mug) in order to provide the best customer service to the student body and staff. | |
| **Priority Standards:**<br><br>**MME.RMGT.3:** Students will describe the techniques and strategies used to foster positive, ongoing relationships with customers. | **Learning Targets:**<br><br>Students will be able to understand customer service strategies and processes.<br><br>Develop positive relationships with customers.<br><br>Students will role-play customer service situations and showcase they understand how to handle different customer service situations. |
| **Supporting Standards:**<br><br>**MME.RMGT.9:** Students will describe tools, techniques, and systems that are used to plan, implement, monitor, and evaluate business projects.<br><br>**WCRS.LRN.2:** Critical thinking and problem-solving – Develop the motivation and acquire the critical thinking and creative problem-solving skills needed to prepare for future education and careers. | |

| **Unit:** Operations | **Duration:** 5 Weeks (spread throughout the course) |
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| **Unit Objectives (overarching objectives):**<br><br>Students will take what they have learned throughout the course and apply skills in the school based enterprise. Students will be assessed on their work readiness and job skills. | |
| **Priority Standards:**<br><br>**MME.RMGT.5:** Students will execute the processes and systems implemented to monitor, plan, and control the day-to-day activities required for continued business functioning.<br><br>**MME.RMGT.8:** Students will analyze the concepts and processes needed to obtain, develop, maintain, and improve a product or service mix in response to market opportunities. | **Learning Targets:**<br><br>Students will practice by engaging in hands-on work experience in the school based learning enterprise (The Maroon Mug) during class. Students will be broken up into groups and will rotate the different job task stations.<br><br>Students will apply customer service, teamwork, communication, and sales strategies.<br><br>Students will demonstrate the following skills: Initiative, hard work, professionalism, and communication. |
| **Supporting Standards:**<br><br>**MME.RMGT.6:** Students will describe the concepts, systems, and tools needed to gather, access, synthesize, evaluate, and disseminate information for use in making business decisions.<br><br>**MME.RMGT.7:** Students will evaluate the concepts and processes needed to move, store, locate, and transfer ownership of goods and services.<br><br>**MME.RMGT.9:** Students will describe tools, techniques, and systems that are used to plan, implement, monitor, and evaluate business projects.<br><br>**WCRS.CAR.4a:** Career Preparation (GO) – GO into the community to implement an individual career plan to learn in a variety of workplace settings and industries.<br><br>**WCRS.LRN.4:** Technology skills – Acquire commonly used technology skills required for all careers.<br><br>**WCRS.LIF.3:** Global competence – Understand one's impact on the world and develop the | |

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| ability to interact with people from other backgrounds, nations, and cultures. |

## Sports and Entertainment Marketing Curriculum

(1 credit)(36 weeks) Updated: February 2025

| **Unit:** SEM Intro | **Duration:** 2 Weeks |
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| **Unit Objectives (overarching objectives):**<br><br>In this unit, students will develop a comprehensive understanding of the role and function of sports and event marketing in business, emphasizing its impact on economic exchanges with consumers. Students will explore the nature of both event and sports marketing, examining key principles, strategies, and industry trends. They will analyze the relationship between the growth of the sports industry and the marketing efforts that drive fan engagement, sponsorships, and revenue generation. Additionally, students will define and differentiate between “event marketing” and “sports marketing” while identifying various categories of event-goers and their behaviors. Through real-world examples and hands-on activities, students will gain insight into how marketing influences consumer decisions and contributes to the success of sports and entertainment events. | |
| **Priority Standards:**<br><br>**MME.SEM.1:** Students will understand sport/event marketing’s role and function in business to facilitate economic exchanges with customers.<br><br>**MME.SEM.1.A:** Explain the nature of event marketing.<br><br>**MME.SEM.1.B:** Explain the nature of sports marketing.<br><br>**MME.MKT.1:** Students will review, utilize, and develop the four areas of the marketing mix as they relate to a SEM industry. | **Learning Targets:**<br><br>**Students will** explain the relationship between the growth of the sports industry and its marketing strategies.<br><br>**Students will** identify and describe different categories of event-goers based on their preferences and behaviors.<br><br>**Students will** define and differentiate between “event marketing” and “sports marketing.”<br><br>**Students will** explain how sports and event marketing contribute to economic exchanges and business success.<br><br>**Students will** analyze the unique |

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| | characteristics and strategies used in event marketing.<br><br>**Students will** describe how sports marketing functions and its impact on the industry.<br><br>**Students will** develop a list of key benefits associated with a school sports marketing plan.<br><br>**Students will** examine factors that influence consumer decisions when attending sports and entertainment events.<br><br>**Students will** identify and evaluate effective marketing strategies used in the sports and entertainment industry.<br><br>**Students will** create a basic marketing plan for a school sports team or event incorporating key marketing principles. |
| **Supporting Standards:**<br><br>**MME.SEM.1.B.i.1**: Describe the relationship between the growth and marketing of the sport industry.<br>**MME.SEM.1.A.i.1**: Describe categories of event-goers.<br>**MME.SEM.1.A.b.1**: Define the term “event marketing.” and “sports marketing” | |

| **Unit:** Careers in SEM | **Duration:** 2 Weeks |
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| **Unit Objectives (overarching objectives):**<br><br>In this unit, students will explore career opportunities within the sports and event marketing industry, gaining valuable insight into the diverse career paths available. They will identify various types of businesses that offer roles in sports and event marketing, ranging from professional sports teams and entertainment venues to advertising agencies and corporate sponsorship firms. Students will research and analyze the academic pathways, skills, and experiences necessary to pursue a career in this field, including college programs, certifications, and internships. Additionally, students will be encouraged to seek hands-on learning experiences through job shadowing, industry interviews, and field trips to gain | |

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| real-world exposure to the industry. By the end of the unit, students will have a clearer understanding of potential career options and the steps needed to achieve their professional goals in sports and event marketing. | |
| **Priority Standards:**<br><br>**MME.SEM.2:** Students will acquire information about the sport/event industry to aid in making career choices.<br><br>**MME.SEM.2.C:** Explain career opportunities in sport/event marketing. | **Learning Targets:**<br><br>**Students will** explain various career opportunities available in the sports and event marketing industry.<br><br>**Students will** identify different types of businesses that offer careers in sports and event marketing.<br><br>**Students will** research specific academic pathways, including degrees and certifications, required for careers in sports and entertainment marketing.<br><br>**Students will** explore the skills and qualifications needed to be successful in various sports and event marketing careers.<br><br>**Students will** investigate real-world job responsibilities and roles within the sports and entertainment marketing industry.<br><br>**Students will** analyze industry trends and their impact on career opportunities in sports and event marketing.<br><br>**Students will** seek opportunities to job shadow, interview professionals, or participate in field trips to gain hands-on industry experience.<br><br>**Students will** evaluate the benefits of networking and professional development for career growth in sports and event marketing.<br><br>**Students will** create a personal career plan outlining their interests, goals, and steps needed to pursue a career in the industry.<br><br>**Students will** develop a resume and cover letter tailored for a job in the sports and |

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| | entertainment marketing field. |
| **Supporting Standards:**<br><br>**MME.SEM.2.C.b.1**: Identify types of businesses that offer careers in sport/event marketing.<br>**MME.SEM.2.C.i.2**: Research and explore specific academic pathways needed to obtain a career in the sports and entertainment marketing industry.<br>**MME.SEM.2.C.a.2**: Seek opportunities to job shadow, interview, or participate in on-site learning opportunities within the sports and entertainment marketing industry. | |

| **Unit:** Market Segmentation | **Duration:** 3 Weeks |
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| **Unit Objectives (overarching objectives):**<br><br>In this unit, students will explore the concept of target marketing in the sports and entertainment industry and its role in maximizing return on marketing investment (ROMI). They will examine the advantages and disadvantages of using market segmentation strategies and learn how to identify key demographic characteristics such as age, income, and lifestyle that influence consumer behavior. Students will conduct a market analysis by evaluating factors such as market size, geographic area, and potential customer reach. Through hands-on activities and real-world case studies, students will demonstrate the procedures for analyzing target markets and selecting the most effective audience for a sports or entertainment product or event. By the end of the unit, students will understand how data-driven marketing decisions impact business success in the industry. | |
| **Priority Standards:**<br><br>**MME.SEM.3:** Students will select the target market appropriate for the product or business to obtain the best return on the marketing investment (ROMI).<br><br>**MME.SEM.3.A:** Describe the nature of target marketing in sport/event marketing.<br><br>**MME.SEM.3.E:** Conduct market analysis: market size, area, potential, etc. | **Learning Targets:**<br><br>**Students will** explain the concept of target marketing and its importance in sports and event marketing.<br><br>**Students will** describe the advantages and disadvantages of using market segments within the sports and entertainment industry.<br><br>**Students will** identify key demographic characteristics that sports and event marketers analyze, such as age, income, and lifestyle. |

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| | **Students will** conduct a market analysis by evaluating market size, geographic area, and potential customer base.<br><br>**Students will** differentiate between various market segmentation strategies, including demographic, psychographic, geographic, and behavioral segmentation.<br><br>**Students will** analyze real-world examples of successful target marketing strategies used in sports and entertainment.<br><br>**Students will** evaluate the impact of selecting the right target market on return on marketing investment (ROMI).<br><br>**Students will** demonstrate the steps involved in conducting a market analysis for a sports or entertainment event.<br><br>**Students will** use data and research to determine the most effective target market for a specific sports or entertainment product.<br><br>**Students will** develop a marketing plan that includes a clearly defined target market and strategies to reach that audience effectively. |
| **Supporting Standards:**<br><br>**MME.SEM.3.A.i.1:** Describe advantages and disadvantages of using market segments within the sports and entertainment industry.<br>**MME.SEM.3.B.i.1:** Describe demographic characteristics that sport/event marketers analyze.<br>**MME.SEM.3.E.a.1:** Demonstrate procedures for conducting a market analysis. | |

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| **Unit:** Market Analysis | **Duration:** 3 Weeks |
| **Unit Objectives (overarching objectives):**<br><br>In this unit, students will learn how to use marketing information to develop effective marketing | |

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| strategies for the sports and entertainment industry. They will conduct a SWOT analysis to evaluate the strengths, weaknesses, opportunities, and threats associated with a sports or entertainment event, gaining insight into how businesses make strategic decisions. Students will also explore the process of forecasting sales by analyzing market trends, consumer demand, and past event performance. Using this information, they will demonstrate the procedures for developing a comprehensive marketing plan that includes key components such as target audience, promotional strategies, and financial projections. By the end of the unit, students will understand how data-driven decision-making influences the success of sports and entertainment marketing initiatives. | |
| **Priority Standards:**<br><br>**Standard MME.SEM.4:** Students will employ marketing information to plan marketing activities.<br><br>**MME.SEM.4.A:** Conduct strengths, weaknesses, opportunities, and threats (SWOT) analysis for use in the marketing-planning process.<br><br>**MME.SEM.4.C:** Develop a marketing plan. | **Learning Targets:**<br><br>**Students will** explain the importance of using marketing information to develop effective marketing strategies in the sports and entertainment industry.<br><br>**Students will** conduct a SWOT analysis to assess the strengths, weaknesses, opportunities, and threats of a sports or entertainment event.<br><br>**Students will** explain the procedures for conducting a SWOT analysis and how it influences marketing decision-making.<br><br>**Students will** analyze real-world examples of SWOT analyses in sports and entertainment marketing.<br><br>**Students will** demonstrate how to forecast sales for a sports or entertainment event by analyzing market trends and historical data.<br><br>**Students will** identify key components of a successful marketing plan within the sports and entertainment industry.<br><br>**Students will** develop a marketing plan that includes target market identification, promotional strategies, and financial projections.<br><br>**Students will** evaluate different marketing strategies used by sports teams, venues, and entertainment companies to attract |

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| | consumers.<br><br>**Students will** apply marketing data to make informed decisions that enhance the success of a sports or entertainment event.<br><br>**Students will** present and justify their marketing plan, demonstrating an understanding of strategic planning in the industry. |
| **Supporting Standards:**<br><br>**MME.SEM.4.B.a.1**: Demonstrate how to forecast sales for a sport or other event.<br>**MME.SEM.4.A.i.1:** Explain procedures for conducting a SWOT analysis for a sports or other event.<br>**MME.SEM.4.C.a.1**: Demonstrate procedures for developing marketing plans within the sports and entertainment industry. | |

| **Unit:** Trends in SEM | **Duration:** 3 Weeks |
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| **Unit Objectives (overarching objectives):**<br><br>In this unit, students will explore how data and industry trends influence decision-making in sports and entertainment marketing. They will identify and analyze current trends in the sports and event industry, examining how emerging technologies, consumer behaviors, and market shifts impact marketing strategies. Students will also investigate the economic impact of sports and entertainment events by learning how to measure financial contributions such as ticket sales, tourism revenue, job creation, and local business growth. They will demonstrate procedures for calculating economic impact and discuss the various methods used to assess an event's financial influence. Additionally, students will evaluate how businesses, teams, and event organizers use economic impact data to guide strategic planning and investment decisions. By the end of the unit, students will understand the significance of data-driven decision-making in maximizing profitability and sustainability within the sports and entertainment industry. | |
| **Priority Standards:**<br><br>**Standard MME.SEM.5:** Students will acquire information to guide business | **Learning Targets:**<br><br>**Students will** identify current trends in the sports and entertainment industry and |

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| decision-making.<br><br>**MME.SEM.5.A:** Identify sport/event trends.<br><br>**MME.SEM.5.B:** Measure the economic impact of sports/events. | analyze their impact on marketing strategies.<br><br>**Students will** research and evaluate emerging technologies and consumer preferences shaping the future of sports and event marketing.<br><br>**Students will** analyze current sports and event trends to determine their influence on fan engagement and revenue generation.<br><br>**Students will** explain the concept of economic impact and its significance in sports and entertainment marketing.<br><br>**Students will** identify different methods used to measure the economic impact of sports and entertainment events.<br><br>**Students will** demonstrate procedures for calculating the economic impact of a sports or entertainment event using real-world data.<br><br>**Students will** discuss various factors that contribute to the economic impact of events, including tourism, job creation, and local business revenue.<br><br>**Students will** explain how economic impact data is used by businesses, teams, and event organizers to make informed marketing and financial decisions.<br><br>**Students will** evaluate case studies of major sporting events to assess their economic impact on host cities and regions.<br><br>**Students will** present findings on a selected sports or entertainment event, demonstrating their ability to analyze trends and measure economic impact. |
| **Supporting Standards:**<br><br>**MME.SEM.5.A.a.1:** Analyze current sport/event trends.<br>**MME.SEM.5.B.a.1:** Demonstrate procedures for measuring the economic impact of sports | |

and events.
**MME.SEM.5.B.b.1:** Discuss types of measures that can be used to determine the economic impact of events.
**MME.SEM.5.B.i.1:** Explain how the results of economic impact measures can be used within the sports and entertainment industry.

| **Unit:** Products in SEM | **Duration:** 3 Weeks |
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| **Unit Objectives (overarching objectives):**<br><br>In this unit, students will explore how product-mix strategies in sports and entertainment marketing are used to meet customer expectations and drive revenue. They will examine the key elements of a sport or event product, including tangible and intangible factors that influence consumer perception. Students will analyze how brand loyalty is built through entertainment value, authenticity, fan engagement, and historical significance. Additionally, they will identify merchandising opportunities and demonstrate the process of selecting and promoting licensed products that enhance fan experience and maximize profitability. Students will also distinguish between internal and external licensing administration, gaining insight into how teams, leagues, and entertainment organizations manage branding rights. By the end of the unit, students will understand how strategic product development and merchandising contribute to business success in the sports and entertainment industry. | |
| **Priority Standards:**<br><br>**MME.SEM.6:** Students will employ product-mix strategies to meet customer expectations.<br><br>**MME.SEM.6.A:** Explain elements of the sport/event product.<br><br>**MME.SEM.6.C:** Determine merchandising opportunities for a sport/event. | **Learning Targets:**<br><br>**Students will** explain the key elements of a sport or event product and how they contribute to the overall customer experience.<br><br>**Students will** analyze how factors such as entertainment value, authenticity, fan bonding, and tradition contribute to brand and fan loyalty.<br><br>**Students will** evaluate successful sports and entertainment brands to determine what drives consumer loyalty and long-term engagement.<br><br>**Students will** identify merchandising opportunities within the sports and entertainment industry that enhance brand |

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| | recognition and revenue.<br><br>**Students will** demonstrate procedures for selecting, developing, and promoting merchandise for a sports or entertainment event.<br><br>**Students will** distinguish between internal and external administration of licensing programs and explain their roles in brand management.<br><br>**Students will** explore how sponsorships and licensing agreements impact merchandising opportunities in the industry.<br><br>**Students will** assess the effectiveness of merchandising strategies used by professional teams, entertainment venues, and event organizers.<br><br>**Students will** create a merchandising plan for a sports or entertainment event, incorporating branding, licensing, and promotional strategies. |
| **Supporting Standards:**<br><br>**MME.SEM.6.B.a.1:** Identify factors that create brand/fan loyalty: entertainment value, authenticity, fan bonding, and history/tradition.<br>**MME.SEM.6.C.a.1:** Demonstrate procedures for determining merchandising opportunities for a sport/event.<br>**MME.SEM.6.H.a.1:** Distinguish between internal and external administration of licensing programs within the sports and entertainment industry. | |

| **Unit:** Pricing Strategies in SEM | **Duration:** 4 Weeks |
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| **Unit Objectives (overarching objectives):**<br><br>In this unit, students will explore the role of pricing strategies in maximizing profitability within the sports and entertainment marketing industry. They will learn how to calculate the | |

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| break-even point for sports and entertainment products and explain its importance in setting appropriate prices. Students will analyze various pricing strategies, such as premium pricing, penetration pricing, and discount pricing, to determine how they impact revenue and consumer demand. Additionally, they will evaluate promotional pricing strategies used to attract fans, increase ticket sales, and drive merchandise revenue. Through real-world case studies and hands-on activities, students will develop and justify their own pricing strategies for sports or entertainment events, ensuring they align with business objectives and market conditions. By the end of the unit, students will understand how pricing decisions influence financial success in the sports and entertainment industry. | |
| **Priority Standards:**<br><br>**MME.SEM.7:** Students will employ pricing strategies to determine optimal pricing**.**<br><br>**MME.SEM.7.A:** Calculate break-even point.<br><br>**MME.SEM.7.B:** Select pricing strategies. | **Learning Targets:**<br><br>**Students will** explain the importance of the break-even point in determining pricing strategies within the sports and entertainment industry.<br><br>**Students will** calculate the break-even point for a sports or entertainment product using cost and revenue data.<br><br>**Students will** analyze how different pricing strategies impact profitability and consumer demand in sports and entertainment marketing.<br><br>**Students will** compare various pricing strategies, including premium pricing, penetration pricing, and discount pricing.<br><br>**Students will** select appropriate promotional pricing strategies to increase attendance, merchandise sales, and brand engagement at sports and entertainment events.<br><br>**Students will** demonstrate procedures for setting ticket prices based on factors such as market demand, competition, and event costs.<br><br>**Students will** explore the role of dynamic pricing and how it influences revenue for |

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| | teams, venues, and entertainment businesses.<br><br>**Students will** evaluate real-world case studies of successful and unsuccessful pricing strategies in the sports and entertainment industry.<br><br>**Students will** develop a pricing strategy for a sports or entertainment product, incorporating cost analysis and market trends.<br><br>**Students will** present and justify their pricing strategy, explaining how it maximizes revenue while meeting consumer expectations. |

**Supporting Standards:**

**MME.SEM.7.A.i.1:** Explain the importance of the break-even point in setting prices within the sports and entertainment marketing industry.
**MME.SEM.7.B.i.1:** Select promotional pricing strategies for sports and events.
**MME.SEM.7.A.a.1:** Calculate the break-even point for a sports or entertainment product.
**MME.SEM.7.B.a.1:** Demonstrate procedures for selecting appropriate pricing strategies for products with the sports and entertainment industry.

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| **Unit:** Sponsorships/Endorsements | **Duration:** 4 Weeks |

**Unit Objectives (overarching objectives):**

In this unit, students will develop an understanding of how product knowledge enhances communication and drives successful relationships in sports and entertainment marketing. They will learn the importance of prospecting for corporate sponsors and how sponsorships contribute to the financial success of sports teams, events, and entertainment brands. Students will also explore techniques for building and maintaining relationships with clients, customers, and fans, focusing on factors that influence initial interactions and long-term engagement. Through role-playing exercises and case studies, students will demonstrate effective communication strategies for establishing trust and rapport with potential sponsors and consumers. By the end of the unit, students will be able to apply these skills to real-world sports and entertainment marketing scenarios, ensuring that products and sponsorship

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| opportunities align with customer and business needs. | |
| **Priority Standards:**<br><br>**MME.SEM.8:** Students will acquire product knowledge to communicate product benefits and to ensure the appropriateness of the product for the customer.<br><br>**MME.SEM.8.A:** Prospect for corporate sponsors.<br><br>**MME.SEM.8.B:** Establish relationships with sport/event clients/customers/fans. | **Learning Targets:**<br><br>**Students will** explain the importance of product knowledge in effectively communicating product benefits to customers in sports and entertainment marketing.<br><br>**Students will** identify key factors that influence a company's decision to sponsor a sports team, event, or entertainment brand.<br><br>**Students will** research and prospect potential corporate sponsors based on brand alignment and marketing objectives.<br><br>**Students will** analyze successful corporate sponsorships and their impact on brand awareness and revenue generation.<br><br>**Students will** identify techniques used to establish relationships with customers, clients, and fans in the sports and entertainment industry.<br><br>**Students will** demonstrate effective communication strategies for making initial contact with potential sponsors and clients.<br><br>**Students will** compare different relationship-building techniques and evaluate their effectiveness in engaging fans and customers.<br><br>**Students will** role-play scenarios to practice establishing professional relationships with corporate sponsors, clients, and fans.<br><br>**Students will** develop a sponsorship pitch that highlights the benefits of a sports or entertainment event for potential corporate sponsors.<br><br>**Students will** evaluate the success of sponsorship and customer relationship |

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| | strategies by analyzing case studies from the sports and entertainment industry. |
| **Supporting Standards:**<br><br>**MME.SEM.8.B.b.1:** Identify factors affecting the choice of techniques to use in establishing relationships with customers/clients during initial contact.<br>**MME.SEM.8.B.a.1:** Demonstrate how to establish relationships with customers/clients during the initial contact with them. | |

| **Unit:** Promotions in SEM - Sports Program Project | **Duration:** 4 Weeks |
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| **Unit Objectives (overarching objectives):**<br><br>In this unit, students will explore the role of sponsorships in sports and entertainment marketing, focusing on setting sponsorship objectives and developing compelling proposals. They will be contacting local businesses to solicit sponsorships for the **Sports Program Project.** They will analyze the key components of effective sponsorship agreements, including audience demographics, brand alignment, and activation strategies. Students will demonstrate procedures for writing professional sponsorship proposals that communicate value to potential sponsors. Additionally, they will examine viral marketing strategies and how they can enhance sponsorship visibility and engagement. By integrating digital communication techniques, students will learn how to maximize marketing effectiveness while minimizing costs, ensuring successful sponsorship activation within the sports and entertainment industry. | |
| **Priority Standards:**<br><br>**MME.SEM.9.B:** Set sponsorship objectives.<br><br>**MME.SEM.9.C:** Prepare a sponsorship proposal.<br><br>**MME.SEM.9.E:** Develop viral sport/event marketing strategies.<br><br>**MME.DMKT.5:** Students will plan digital communications to maximize effectiveness and to minimize costs. | **Learning Targets:**<br><br>**Students will** explain the role of sponsorships in sports and entertainment marketing.<br><br>**Students will** identify and analyze key objectives for sponsorship agreements in the sports and entertainment industry.<br><br>**Students will** demonstrate procedures for setting clear and measurable sponsorship objectives. |

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| | **Students will** research successful sponsorship campaigns and evaluate their impact on brand awareness and ROI.<br><br>**Students will** identify the key components of an effective sponsorship proposal, including audience demographics, brand alignment, and activation strategies.<br><br>**Students will** demonstrate procedures for writing a professional sponsorship proposal tailored to a specific sports or entertainment event.<br><br>**Students will** explore viral marketing strategies used to promote sports and entertainment events through digital and social media platforms.<br><br>**Students will** develop a viral marketing campaign designed to maximize audience engagement and sponsorship visibility.<br><br>**Students will** analyze the cost-effectiveness of digital marketing strategies to ensure maximum impact while minimizing expenses.<br><br>**Students will** create a digital marketing plan that integrates sponsorship objectives with viral marketing strategies to enhance brand exposure. |
| **Supporting Standards:**<br><br>**MME.SEM.9.C.a.1:** Demonstrate procedures for writing a sponsorship proposal.<br>**MME.SEM.9.B.a.1:** Demonstrate procedures for setting sponsorship objectives. | |

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| **Unit:** Project Management - DWTSS | **Duration:** 8 Weeks |
| **Unit Objectives (overarching objectives):** | |

In this unit, students will apply project management and strategic management principles to plan, implement, monitor, and evaluate a charity event, **Dancing with the Sports Stars**. They will work in teams focused on various aspects of the event, including sales, pre-approach, follow-ups, promotions, and social media. Students will create a sponsorship proposal package, set clear sponsorship objectives, and engage with potential sponsors through calls and follow-up communications. They will plan and coordinate promotional activities for the event, including print and social media marketing, while learning procedures for managing special events and coordinating community outreach projects. Throughout the unit, students will apply tools and techniques to maximize the return on promotional efforts, ensuring the success of the event while gaining hands-on experience in real-world sports and entertainment marketing practices.

| **Priority Standards:** | **Learning Targets:** |
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| **MME.ENT.10:** Project Management and Strategic Management<br>Students will describe tools, techniques, and systems that are used to plan, implement, monitor, and evaluate business projects.<br><br>**MME.DMKT.5:** Students will plan digital communications to maximize effectiveness and to minimize costs.<br><br>**MME.SEM.9:** Students will manage promotional activities to maximize return on promotional efforts.<br><br>**MME.SEM.9.D:** Coordinate community outreach projects.<br><br>**MME.SEM.9.E:** Develop viral sport/event marketing strategies.<br><br>**MME.SEM.9.G:** Plan special events for sports/events. | **Identify project management tools and techniques** used to plan, implement, monitor, and evaluate business projects in the sports and entertainment industry.<br><br>**Explain strategic management principles** and how they are applied to ensure successful business projects in sports and entertainment marketing.<br><br>**Demonstrate the process of setting sponsorship objectives**, ensuring alignment with business goals and target audiences.<br><br>**Develop a sponsorship proposal package** for a sports or entertainment event, outlining potential sponsors' benefits and strategic objectives.<br><br>**Apply project management systems** to track and manage the progress of marketing campaigns and promotional activities.<br><br>**Create promotional strategies and activities** that maximize the return on investment for marketing efforts in sports and entertainment events.<br><br>**Plan and coordinate a special event** by using appropriate procedures for event marketing, budgeting, and resource |

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| | management.<br><br>**Utilize various promotional channels**, including print, social media, and public relations, to increase visibility and engagement for a sports event.<br><br>**Collaborate with team members** to organize and manage community outreach projects that build positive relationships with the local community.<br><br>**Evaluate the effectiveness of promotional activities** through data analysis and feedback, making adjustments to enhance future marketing strategies and project outcomes. |
| **Supporting Standards:**<br><br>**MME.SEM.9.B.a.1:** Demonstrate procedures for setting sponsorship objectives.<br>**MME.SEM.9.G.a.1:** Demonstrate procedures for planning special events in sport/event marketing.<br>**MME.SEM.9.D.a.1:** Demonstrate procedures for coordinating community outreach projects. | |

# High School Business Curriculum

## Computer Application

(.5 credit) Updated: March 2025

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| **Unit:** Keyboarding | **Duration:** 2 Weeks |
| **Unit Objectives (overarching objectives):** | |

Students will develop proficiency in touch typing, with a focus on increasing typing speed, accuracy, and proper posture. Throughout the unit, students will practice typing techniques, including proper finger placement, efficient use of the home row, and strategies to improve speed without sacrificing accuracy. By the end of the unit, students will be able to type a specified number of words per minute with at least 90% accuracy and demonstrate an understanding of ergonomics to reduce strain while typing. This skill will not only prepare students for future academic and professional settings but also help them enhance productivity in digital communication and tasks.

| **Priority Standards:** | **Learning Targets:** |
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| **BIT.IT.1.A:** Use various input technologies to enter and manipulate information appropriately. | **Students can** demonstrate proper typing posture and ergonomics to minimize strain during keyboarding activities. |
| **BIT.IT.1.A.b.1:** Demonstrate correct finger placement and reach on an alphanumeric keyboard. | **Students can** identify and utilize the home row keys to achieve accurate and efficient typing. |
| **BIT.IT.1.A.a.1:** Demonstrate the touch method of keyboarding on an alphanumeric keyboard at acceptable speed and accuracy levels. | **Students can** type with correct finger placement and use all fingers to improve typing speed and accuracy. |
| **BIT.IT.1.A.i.1:** Prepare documents in a timely fashion without errors. | **Students can** increase typing speed while maintaining at least 90% accuracy on timed tests. |
| | **Students can** demonstrate the ability to type without looking at the keyboard (touch typing). |
| | **Students can** recognize and correct common typing errors, such as incorrect finger placement or posture. |
| | **Students can** practice and apply typing drills to build muscle memory for increased typing efficiency. |
| | **Students can** set and track personal typing goals, working to improve both speed and accuracy over time. |

**Supporting Standards:**

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| **Standard: BIT.IT.1:** Students will apply appropriate computer applications to meet personal and business needs. |

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| **Unit:** Microsoft Word Processing | **Duration:** 4 Weeks |
| **Unit Objectives (overarching objectives):**<br><br>Students will be equipped with the skills necessary to create, format, and edit professional documents using advanced word processing tools. Throughout the unit, students will learn how to effectively organize and communicate information by utilizing features such as spell check, grammar check, word count, and the thesaurus. They will also develop proficiency in customizing document layouts, applying templates and themes, inserting graphic elements, and collaborating on documents through multi-user features. By the end of the unit, students will be able to produce polished, well-organized documents tailored to specific audiences and purposes, while demonstrating efficient use of Microsoft Word's various functionalities to enhance their productivity. | |
| **Priority Standards:**<br><br>**BIT.IT.1.B:** Use word processing applications to organize and effectively communicate information.<br><br>**BIT.IT.1.B.b.1:** Apply reviewing features of a word processor: spell check, grammar check, word count, and thesaurus.<br><br>**BIT.IT.1.B.b.3:** Customize documents using formatting elements: alignment, spacing, borders, and lists.<br><br>**BIT.IT.1.B.i.4:** Insert and modify graphic elements: pictures, video, audio, SmartArt, 3D models, and screenshots.<br><br>**BIT.IT.1.B.i.1:** Utilize templates, themes, and styles to improve productivity and efficiency.<br><br>**BIT.IT.1.B.a.9:** Collaborate on documents using multi-user features: tracking changes, merging documents, and online collaboration. | **Learning Targets:**<br><br>**Students can** use the spell check and grammar check tools in Microsoft Word to ensure their documents are error-free and grammatically correct.<br><br>**Students can** utilize the word count tool to track the length of their document and meet specific assignment requirements.<br><br>**Students can** apply the thesaurus tool to find synonyms and enhance the vocabulary in their documents.<br><br>**Students can** customize the layout of documents by adjusting alignment, spacing, borders, and lists for clarity and visual appeal.<br><br>**Students can** insert and modify graphic elements, such as pictures, videos, audio, SmartArt, 3D models, and screenshots, to enhance document content. |

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| **BIT.BC5:** Students will plan and write documents that are appropriate for the situation, purpose and audience. | **Students can** apply templates, themes, and styles to create professional-looking documents efficiently and consistently.<br><br>**Students can** collaborate on documents by using tracking changes, merging documents, and engaging in online collaboration tools to edit and refine content with others.<br><br>**Students can** create documents using various formatting elements such as headings, font styles, and color to make information easy to read and understand for a specific audience.<br><br>**Students can** plan and write documents that are tailored to their intended purpose, ensuring the tone, structure, and content match the audience's needs.<br><br>**Students can** modify and adjust document settings (such as margins, page orientation, and indentation) to meet specific formatting and presentation requirements. |
| **Supporting Standards:**<br><br>**Standard: BIT.IT.1:** Students will apply appropriate computer applications to meet personal and business needs. | |

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| **Unit:** Microsoft PowerPoint | **Duration:** 4 Weeks |
| **Unit Objectives (overarching objectives):**<br><br>Students will be provided with the skills to create, design, and deliver professional presentations using a range of multimedia tools. Throughout the unit, students will learn how to insert slides, apply layouts, transitions, and animations, as well as format tables, charts, images, and SmartArt to enhance the visual impact of their presentations. Students will also develop proficiency in organizing and aligning slide content for clarity, and they will practice using presenter view to confidently deliver their presentations. By the end of the unit, students will be able to effectively communicate ideas to an audience, tailoring their presentations to | |

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| different purposes and using PowerPoint's features to ensure engaging and polished final products. | |
| **Priority Standards:**<br><br>**BIT.IT.1.D:** Use digital presentation applications to create and deliver a presentation.<br><br>**BIT.IT.1.D.b.1:** Create and deliver a digital presentation.<br><br>**BIT.IT.1.D.b.2:** Insert slides, and apply layouts, transitions, and animations.<br><br>**BIT.IT.1.D.b.3:** Order, align, and group slide content.<br><br>**BIT.IT.1.D.b.4:** Insert and format tables, charts, pictures, SmartArt, 3D models, and media into presentations.<br><br>**BIT.IT.1.D.i.3:** Present slide shows using presenter view.<br><br>**BIT.BC.4.B.a.1:** Prepare and deliver a presentation in professional attire to a large group of people using visual aids to enhance the presentation. | **Learning Targets:**<br><br>**Students can** create and deliver a digital presentation using Microsoft PowerPoint, effectively communicating information to their intended audience.<br><br>**Students can** insert slides into a presentation and apply appropriate layouts, transitions, and animations to enhance visual appeal and audience engagement.<br><br>**Students can** organize and structure slide content by ordering, aligning, and grouping elements to ensure clarity and flow in their presentations.<br><br>**Students can** insert and format tables, charts, pictures, SmartArt, 3D models, and media into presentations to visually support key points and data.<br><br>**Students can** use the presenter view to deliver a slide show, managing slides, notes, and audience interaction effectively during the presentation.<br><br>**Students can** customize slide designs, including background colors, fonts, and themes, to ensure consistency and professionalism throughout the presentation.<br><br>**Students can** apply animation and transition effects to slide elements to improve the visual impact and pacing of their presentation.<br><br>**Students can** effectively use multimedia elements (audio, video) to enhance the message and impact of their presentation.<br><br>**Students can** rehearse and time their presentation using PowerPoint’s timing features to ensure a smooth delivery and |

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| | adherence to time limits.<br><br>**Students can** edit and refine presentations by reviewing content, adjusting formatting, and ensuring that visual elements are aligned with the presentation's purpose. |
| **Supporting Standards:**<br><br>**Standard: BIT.IT.1:** Students will apply appropriate computer applications to meet personal and business needs. | |

| **Unit:** Microsoft Excel | **Duration:** 4 Weeks |
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| **Unit Objectives (overarching objectives):**<br><br>Students will be provided with the foundational skills to organize, analyze, and visualize data effectively using Excel. Throughout the unit, students will learn how to input and format data, use basic formulas and functions for calculations, and create charts and graphs to represent data visually. They will also develop proficiency in managing large data sets, utilizing sorting and filtering tools, and applying conditional formatting to highlight key information. By the end of the unit, students will be able to create well-organized, data-driven documents, interpret complex data, and present their findings in a clear and professional manner using Excel's advanced tools. | |
| **Priority Standards:**<br><br>**BIT.IT.1.C:** Use spreadsheet applications to solve problems and effectively communicate information.<br><br>**BIT.IT.1.C.b.1:** Enter data into a spreadsheet.<br><br>**BIT.IT.1.C.b.2:** Illustrate data using graphs and charts.<br><br>**BIT.IT.1.C.b.3:** Enhance a spreadsheet visually using fonts, colors, and cell properties. | **Learning Targets:**<br><br>**Students can** enter and organize data into a spreadsheet, ensuring accurate and efficient input for analysis.<br><br>**Students can** illustrate data by creating graphs and charts, effectively communicating trends and patterns in the data.<br><br>**Students can** enhance the visual appeal of a spreadsheet by using different fonts, colors, and cell properties to improve readability and presentation. |

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| **BIT.IT.1.C.b.4:** Construct basic formulas and use common functions to perform calculations.<br><br>**BIT.IT.1.C.i.2:** Create, modify, and analyze information in charts. | **Students can** construct basic formulas and apply common functions such as SUM, AVERAGE, and COUNT to perform calculations on data.<br><br>**Students can** create, modify, and analyze charts to visually represent data and identify key insights.<br><br>**Students can** format data using number formatting tools, such as currency, percentage, and date formats, to suit the needs of the spreadsheet.<br><br>**Students can** use sorting and filtering tools to organize data and focus on relevant information.<br><br>**Students can** apply conditional formatting to highlight specific data points based on set criteria, such as values greater than or less than a specified number.<br><br>**Students can** utilize cell references, both relative and absolute, in formulas to perform accurate calculations across multiple cells.<br><br>**Students can** analyze data by using pivot tables and other advanced tools to summarize and present complex information in a clear and concise format. |
| **Supporting Standards:**<br><br>**Standard: BIT.IT.1:** Students will apply appropriate computer applications to meet personal and business needs. | |

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| **Unit:** Internet Safety/Digital Citizenship | **Duration:** 2 Weeks |
| **Unit Objectives (overarching objectives):** | |

Students will be educated on the responsible, ethical, and safe use of technology in both personal and academic contexts. Throughout the unit, students will learn about online privacy, data security, and how to protect themselves from cyber threats such as phishing, identity theft, and cyberbullying. They will explore the concept of digital footprints and the long-term impact of online behavior, while also understanding the importance of respecting others' rights and opinions in digital spaces. By the end of the unit, students will be equipped with the knowledge and skills to navigate the internet safely, communicate respectfully, and make informed decisions regarding their online presence and digital interactions.

| **Priority Standards:** | **Learning Targets:** |
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| **BIT.IT.1.H:** Demonstrate respectful, responsible, inclusive, and ethical digital citizenship.<br><br>**BIT.IT.1.H.a.1:** Recognize the importance of one's digital footprint and how to manage it professionally.<br><br>**BIT.IT.1.H.i.1:** Discuss basic issues related to responsible use of technology and describe personal or legal consequences of inappropriate use.<br><br>**BIT.IT.1.H.i.4:** Demonstrate appropriate behavior and standards when using information technologies.<br><br>**BIT.IT.1.H.a.2:** Analyze legal and ethical dilemmas within the framework of current laws and legislation: hacking, threats, phishing, the use of artificial intelligence, etc. | **Students can** recognize the importance of their digital footprint and explain how to manage it professionally to protect their online reputation.<br><br>**Students can** identify responsible technology use and describe the personal or legal consequences of inappropriate actions, such as cyberbullying or intellectual property theft.<br><br>**Students can** analyze the impact of legal and ethical dilemmas related to technology, including issues such as hacking, phishing, and threats, within the framework of current laws.<br><br>**Students can** discuss the ethical implications of using artificial intelligence and other emerging technologies, considering their potential impact on privacy, security, and society.<br><br>**Students can** practice online etiquette by communicating respectfully and inclusively in digital spaces, including social media, email, and collaborative platforms.<br><br>**Students can** evaluate online content for accuracy and credibility, developing skills to critically assess information in the digital world.<br><br>**Students can** explain how to protect personal information online and the importance of maintaining privacy through |

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| | strong passwords, secure websites, and privacy settings.<br><br>**Students can** identify and avoid common online threats, such as phishing scams, identity theft, and malware, and describe how to respond to potential security breaches.<br><br>**Students can** demonstrate knowledge of digital laws and regulations, such as copyright laws, and practice ethical behavior when creating or sharing digital content. |
| **Supporting Standards:** | |

| **Unit:** Computer & Internet Basics | **Duration:** 2 Weeks |
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| **Unit Objectives (overarching objectives):**<br><br>This unit will provide students with foundational skills in managing and organizing digital information using various computer systems and applications. Students will learn how to navigate and utilize basic operating system features to manage applications, files, and folders on both desktop and cloud systems. They will also gain proficiency in organizing and maintaining data using a database management system and will practice transferring files to and from network shares, cloud storage, and portable storage devices. Additionally, students will develop the skills to create, move, copy, delete, and rename files and folders to ensure efficient file management. The unit will also cover email communication, where students will learn to use email applications to compose, respond, and forward messages appropriately. By the end of the unit, students will be able to efficiently organize, manage, and communicate using various digital tools in both academic and professional settings. | |
| **Priority Standards:**<br><br>**BIT.IT.1.G:** Use basic operating system features to manage applications, files, folders, and settings.<br><br>**BIT.IT.1.E:** Organize, manage, and maintain information using a database management system. | **Learning Targets:**<br><br>**Students can** use basic operating system features to manage applications, files, folders, and settings efficiently.<br><br>**Students can** organize, manage, and maintain information using a database management system to store and retrieve |

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| **BIT.IT.1.G.a.3:** Copy a file to and from a network share, cloud storage location, and portable storage drive.<br><br>**BIT.IT.1.G.b.1:** Create, move, copy, delete, and rename files and folders on desktop and cloud systems.<br><br>**BIT.IT.1.F.b.1:** Use an email application to create an email message, and respond to emails using reply, reply all, and forward appropriately. | data.<br><br>**Students can** copy files to and from network shares, cloud storage locations, and portable storage drives to ensure proper file backup and accessibility.<br><br>**Students can** create, move, copy, delete, and rename files and folders on both desktop and cloud systems to maintain an organized and efficient file structure.<br><br>**Students can** use an email application to compose an email message, addressing recipients appropriately and ensuring clarity and professionalism.<br><br>**Students can** respond to emails using the reply, reply all, and forward functions appropriately, considering the context and audience.<br><br>**Students can** organize email messages by creating folders and using filters or tags to keep their inbox manageable and efficient.<br><br>**Students can** perform basic troubleshooting tasks in the operating system, such as closing unresponsive applications or checking system settings to resolve common issues.<br><br>**Students can** navigate and manage cloud storage platforms, uploading, downloading, and sharing files securely with collaborators.<br><br>**Students can** manage system settings, such as adjusting privacy, security, and accessibility features, to ensure a personalized and secure computing environment. |
| **Supporting Standards:** | |

## Personal Finance

(.5 credit)(18 weeks) Updated: February 2025

| **Unit 1:** Careers and Education | **Duration:** 4 Weeks |
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| **Unit Objectives (overarching objectives):**<br><br>In this unit, students will explore the relationship between personal income and financial goals by examining career choices, education, and skill development. They will compare the benefits and costs of various postsecondary education and training options, analyzing how these choices impact earning potential. Students will research and identify high-demand careers influenced by emerging technologies and evaluate how economic, social, and technological changes shape job markets. Additionally, they will distinguish between jobs and careers, develop a professional resume, and explore the importance of both hard and soft skills in career success. Through these activities, students will gain a deeper understanding of how career planning and financial decision-making influence their future financial well-being. | |
| **Priority Standards:**<br><br>**PFL.EE2:** Students will compare the effect of personal income on their goals.<br><br>**PFL.EE2.a:** Post-Secondary Education, Skills, and Training<br><br>**PFL.EE2.b.h:** Research and identify a job or field that may be in high demand in the future based on emerging technologies.<br><br>**PFL.CD2.a.h:** Compare various types of student loans, repayment options, and alternatives of paying for post-secondary education or training. | **Learning Targets:**<br><br>**Students will** research and identify careers that are projected to be in high demand due to emerging technologies.<br><br>**Students will** analyze how economic, social, and technological changes influence job markets and employment trends.<br><br>**Students will** compare and contrast jobs versus careers, identifying key differences in stability, growth, and income potential.<br><br>**Students will** create a professional resume that highlights their education, skills, and experiences.<br><br>**Students will** define and differentiate between hard and soft skills, explaining their importance in career success.<br><br>**Students will** evaluate the costs and benefits of various postsecondary education and training options, including college, trade schools, and certifications. |

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| | **Students will** explore how different career paths align with personal financial goals and lifestyle expectations.<br><br>**Students will** identify and analyze skills and qualifications required for careers of interest, considering how to develop those skills.<br><br>**Students will** assess the long-term financial impact of educational choices, including student loans, scholarships, and earning potential.<br><br>**Students will** develop a personal career and education plan that outlines steps to achieve their financial and professional goals. |
| **Supporting Standards:**<br><br>**PFL.EE2.b.i:** Explain how economic, social, and technological changes can impact employment trends and markets.<br>**PFL.EE2.b.i:** Contrast jobs versus careers.<br>**PFL.EE2.a.m:** Compare the benefits and costs of a variety of postsecondary education and training options. | |

| **Unit 2:** Budgeting and Life Purchases | **Duration:** 5 Weeks |
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| **Unit Objectives (overarching objectives):**<br><br>In this unit, students will develop essential money management skills by learning how to create and implement effective financial plans. They will construct weekly and monthly budgets that account for various sources of income, planned savings strategies, taxes, and both fixed and variable expenses. Students will explore real-world financial scenarios, such as renting an apartment based on their chosen career, purchasing a vehicle, planning grocery expenses, and evaluating the costs of homeownership. Additionally, they will analyze and compare different types of income, including active and passive sources, as well as various savings and investment vehicles. By applying these concepts, students will gain the knowledge and skills necessary to make informed financial decisions that align with their personal goals and future financial stability. | |

| **Priority Standards:** | **Learning Targets:** |
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| **PFL.MM1:** Students will demonstrate their ability to use money management skills and strategies.<br><br>**PFL.MM1.a.h:** Prepare a budget or spending plan that depicts varying sources of income, a planned saving strategy, taxes, and other sources of fixed and variable spending. | **Students will** prepare a detailed budget or spending plan that includes income, savings, taxes, and fixed and variable expenses.<br><br>**Students will** construct a monthly budget that demonstrates effective allocation of income toward spending and savings.<br><br>**Students will** identify and provide examples of various household expenses and common sources of income.<br><br>**Students will** create a budget for renting an apartment based on the expected income from their chosen career.<br><br>**Students will** analyze the costs and financial considerations of purchasing or leasing a vehicle.<br><br>**Students will** plan a grocery shopping trip within a set budget, comparing costs and prioritizing needs over wants.<br><br>**Students will** explore the financial responsibilities of homeownership, including mortgage payments, property taxes, and maintenance costs.<br><br>**Students will** develop a long-term money management plan that incorporates budgeting, saving, investing, and financial decision-making for future goals. |
| **Supporting Standards:**<br><br>**PFL.MM1.a.m:** Construct a basic budget, including allocating spending and savings that spans for a week or a month.<br>**PFL.MM1.a.i:** Provide examples of household expenses and sources of income.<br>**PFL.MM1.b.h:** Compare and contrast different sources of active and passive income, savings, and investment vehicles. | |

| **Unit 3:** Credit and Debt Management | **Duration:** 3 Weeks |
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| **Unit Objectives (overarching objectives):**<br><br>In this unit, students will explore the benefits and risks associated with using credit and how it impacts financial well-being. They will analyze different uses of credit, evaluating how it can provide financial and personal benefits while also understanding its potential disadvantages. Students will assess the total cost of borrowing by examining interest rates, loan terms, fees, and repayment periods, calculating how these factors influence the overall cost of a loan. Additionally, they will investigate the implications of bankruptcy, including its effects on assets, employability, and future credit opportunities. Students will also compare high-cost alternative lending products, such as payday loans and rent-to-own agreements, to understand their risks. By researching credit cards, students will gain the knowledge needed to make informed credit decisions, select appropriate financial products, and manage debt responsibly. | |
| **Priority Standards:**<br><br>**PFL.CD1:** Students will examine the benefits and costs of using credit.<br><br>**PFL.CD1.a.h:** Analyze uses of credit that provide financial and personal benefits<br>.<br>**PFL.CD1.a.i:** Summarize the advantages and disadvantages of using credit. | **Learning Targets:**<br><br>**Students will** analyze various uses of credit and determine how it can provide financial and personal benefits.<br><br>**Students will** summarize the advantages and disadvantages of using credit for purchases and financial management.<br><br>**Students will** assess the total cost of taking out a loan by examining interest rates, loan fees, and repayment terms.<br><br>**Students will** calculate the total cost of repaying a loan under different interest rates and loan durations.<br><br>**Students will** investigate different types of bankruptcy and evaluate their effects on assets, employability, and credit availability.<br><br>**Students will** compare and contrast the risks and costs of high-cost alternative lending products, such as payday loans.<br><br>**Students will** examine the Fair Debt Collection Practices Act and Fair Credit Reporting Act to understand their consumer rights and protections. |

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| | **Students will** research different credit card options and determine which best fits their personal financial situation and spending habits.<br><br>**Students will** evaluate the impact of credit scores on loan approvals, interest rates, and overall financial stability.<br><br>**Students will** develop strategies to use credit responsibly, avoid excessive debt, and maintain a healthy credit history. |
| **Supporting Standards:**<br><br>**PFL.CD1.b.h:** Assess the total cost of incurring a loan (e.g., various rates of interest, loan origination fee, early payback, or length of term).<br>**PFL.CD1.c.h:** Calculate the total cost of repaying a loan under various rates of interest and over different time periods.<br>**PFL.CD1.d.h:** Investigate the purpose and types of bankruptcy<br>**PFL.CD2.b.h:** Compare and contrast advantages, disadvantages, and risks of high-cost alternative lending products and practices (e.g., refund anticipation loan, payday lending, or rent-to-own). | |

| **Unit 4:** Insurance | **Duration:** 3 Weeks |
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| **Unit Objectives (overarching objectives):**<br><br>In this unit, students will explore the various types of financial risks and the ways these risks can impact personal financial decisions. They will analyze different perceptions of risk based on factors such as age, culture, and social status, gaining insight into how financial protection strategies vary among individuals. Students will examine different types of insurance, including health, auto, home, life, and disability insurance, to understand their purpose and benefits. They will assess the consequences of not having insurance protection in various scenarios and evaluate the role of insurance in mitigating financial risks. By the end of the unit, students will be able to develop a risk management plan that includes appropriate insurance coverage and financial protection strategies to safeguard their financial well-being. | |
| **Priority Standards:** | **Learning Targets:** |

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| **PFL.RM1:** Students will contrast different types of risk and how it could affect their financial decisions.<br><br>**PFL.RM2:** Students will assess possible choices to protect themselves from financial risk.<br><br>**PFL.RMI2.b:** Types of Insurance**:** Describe different types of insurance. | **Students will** identify and contrast different types of financial risk and analyze how they can impact personal financial decisions.<br><br>**Students will** assess various strategies to protect themselves from financial risks and unexpected expenses.<br><br>**Students will** describe different types of insurance, including health, auto, home, life, and disability insurance.<br><br>**Students will** analyze how age, culture, and social status influence individual perceptions of financial risk.<br><br>**Students will** evaluate real-life scenarios to predict the potential financial consequences of not having insurance protection.<br><br>**Students will** determine the benefits of insurance in reducing financial risks and providing financial security.<br><br>**Students will** compare different insurance policies and coverage options to identify the best choices based on personal financial situations.<br><br>**Students will** explain the role of deductibles, premiums, and coverage limits in determining the cost and benefits of insurance.<br><br>**Students will** assess the importance of emergency savings and insurance in mitigating financial risks.<br><br>**Students will** develop a personal risk management plan that includes insurance and other financial protection strategies. |
| **Supporting Standards:**<br><br>**PFL.RMI1.a.h:** Determine different perceptions of risk based on age, culture, and social status. | |

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| **PFL.RMI2.c.e:** Predict consequences of not having protection for various scenarios.<br>**PFL.RMI2.d.i:** Determine the benefits of insurance |

| **Unit 5:** Saving and Investing | **Duration:** 3 Weeks |
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| **Unit Objectives (overarching objectives):**<br><br>In this unit, students will develop an understanding of savings and investment strategies to build financial security. They will compare different savings approaches, such as "pay yourself first" versus living paycheck to paycheck, and evaluate the differences between checking, savings, and debit accounts. Students will explore various savings options, including money market accounts and certificates of deposit, assessing the risks and rewards associated with each. They will apply key financial principles such as the time value of money, compound interest, and the Rule of 72 to understand long-term wealth accumulation. Additionally, students will investigate investment choices, including stocks, bonds, mutual funds, and collectibles, to analyze potential income and growth opportunities. They will identify short- and long-term financial goals and determine investment strategies to achieve them while considering the risks and rewards of different investment vehicles. By the end of the unit, students will be able to create a personal financial plan that incorporates both savings and investment strategies to build long-term financial stability. | |
| **Priority Standards:**<br><br>**PFL.SI1:** Students will explore savings concepts and apply this knowledge to attain financial security.<br><br>**PFL.SI2:** Students will explore investing concepts and apply this knowledge to attain financial security. | **Learning Targets:**<br><br>**Students will** compare the benefits and drawbacks of the "pay yourself first" strategy versus living paycheck to paycheck.<br><br>**Students will** differentiate between savings, checking, and debit accounts, explaining their purposes and uses.<br><br>**Students will** analyze and contrast various savings options, including savings accounts, money market accounts, and certificates of deposit.<br><br>**Students will** evaluate the risks and rewards associated with different savings methods, such as interest-bearing accounts and accounts with no loss of principal. |

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| | **Students will** calculate the time value of money using concepts like compound interest and the Rule of 72 to demonstrate the importance of long-term saving.<br><br>**Students will** explore various investment options, including stocks, bonds, mutual funds, and collectibles, to understand their potential for income and growth.<br><br>**Students will** develop a prioritized list of short-term and long-term financial investment goals and propose strategies to achieve them.<br><br>**Students will** assess the risks and rewards of different investment vehicles and determine which align best with specific financial goals.<br><br>**Students will** explain how economic conditions, inflation, and interest rates impact savings and investment strategies.<br><br>**Students will** apply savings and investment concepts to create a personal financial plan that balances security, growth, and risk management. |

**Supporting Standards:**

**PFL.SI1.a.m:** Compare pay yourself first to living paycheck to paycheck.
**PFL.SI1.b.m:** Compare and contrast savings versus checking and debit accounts.
**PFL.SI1.b.h:** Compare and contrast characteristics of basic savings options (e.g., savings accounts, money market accounts, or certificates of deposit).
**PFL.SI1.d.i:** Compare types of risks and rewards when saving (e.g., no loss of principal, interest-bearing).
**PFL.SI2.a.h:** Compute time value of money (TVM) principles (e.g., compound interest or Rule of 72).
**PFL.SI2.b.m:** Explore investing choices (e.g., collectibles, stocks, bonds, or mutual funds) which can produce income or growth.
**PFL.SI2.c.m:** Create a prioritized list of short- and long-term personal financial investment goals and suggest methods to achieve those goals.
**PFL.SI2.d.i:** Give examples of investing risks and rewards.

## Web Design Curriculum

(.5 credit) Updated: February 2025

| **Unit:** Introduction to Web Design | **Duration:** 3.5 Weeks |
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| **Unit Objectives (overarching objectives):**<br><br>Students will be introduced to the course and learn fundamental concepts of the internet and how websites are structured, including basic ideas about HTML and how web pages are displayed in a browser. We will also explore the career of a web developer. This unit serves as the starting point for understanding the building blocks of a website, laying the groundwork for learning more advanced HTML and CSS concepts later on. Students will cover basic web terminology key terms like "web page," "browser," "URL," "HTML tags," and the concept of hyperlinks. | |
| **Priority Standards:**<br><br>**Standard MME.DMKT.3:** Students will acquire a foundational knowledge of digital marketing to understand its nature and scope.<br><br>**Standard BIT.CS.4:** Students will demonstrate how computer systems and networks work and how dividing tasks across multiple computing devices can improve the speed and efficiency at which processes occur.<br><br>**Standard BIT.CS.5:** Students will develop an understanding of how the creation of computer programs can have an extensive impact, sometimes unintended, on society, economies, and cultures. | **Learning Targets:**<br><br>● Get to know course objectives and expectations, classmates and teacher.<br>● Identify what the web is.<br>● Explain web design.<br>● Explain the career of a web developer.<br>● Articulate the difference between web design and development.<br>● Identify how websites have changed education, arts and commerce.<br>● Describe how users are able to get specific web pages to their computers.<br>● Explain that the internet is a network of networks.<br>● Compare and contrast the different levels of censorship that different organizations or countries impose on the internet.<br>● Identify what a browser is.<br>● Identify what a browser is not.<br>● Explain the purpose of a browser.<br>● List several kinds of browsers.<br>● Describe the process of visiting a webpage, from typing the URL to viewing the page. |

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| | ● Learn about the basics of HTML.<br>● Fill in a simple HTML page.<br>● Explain what digital marketing is.<br>● Identify how web design fits into digital marketing.<br>● Identify how social media fits into digital marketing.<br>● Create a Facebook cover photo.<br>● Identify current knowledge of web design.<br>● Explain the various types of websites. |
| **Supporting Standards:**<br><br>**Standard: BIT.IT.1:** Students will apply appropriate computer applications to meet personal and business needs. | |

| **Unit:** Designing and Planning a Website | **Duration:** 6 Weeks |
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| **Unit Objectives (overarching objectives):**<br><br>Students will evaluate websites to help them consider how to best design and plan a website. They will focus on the design elements of color, and typography/font. Students will consider how the target market/ target audience impact web design. Students will explore how websites are organized and the impact of information architecture including site structure. Students identify impacts of web standards and accessibility. | |
| **Priority Standards:**<br><br>**Standard: BIT.DCM.1:** Students will create publish-quality media for intended audiences or purposes through the use of advanced layout, design, and graphics production software and hardware.<br><br>**Standard MME.DMKT.3:** Students will acquire a foundational knowledge of digital marketing to understand its nature and scope.<br><br>**Standard MME.DMKT.4:** Students will plan | **Learning Targets:**<br><br>● Define web design.<br>● Explain the digital age.<br>● Identify/explain the purpose of web browsers.<br>● Explain websites and web pages.<br>● Explain evolution of websites & web design.<br>● Critically evaluate websites based on purpose, design and usability.<br>● Identify the major criteria that experts use to evaluate web sites and apply those criteria to your own evaluations. |

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| content for use in marketing communications to create interest in the product, business, or idea.<br><br>**Standard: BIT.CS.6:** Students will develop an understanding that building an inclusive and diverse computing culture is important to business and society. | ● Explain what makes a high-quality website.<br>● Develop a website evaluation tool.<br>● Articulate design elements of web design.<br>● Explain how color theory and psychology impacts web design and marketing.<br>● Identify color symbolism.<br>● Understand the various color types.<br>● Identify the impact of typography and font.<br>● Differentiate between typeface and font.<br>● Explain font psychology.<br>● Differentiate between serif, sans serif, script and decorative font styles.<br>● Define target market and target audience.<br>● Identify market segmentation components- demographics, psychographics, geographics.<br>● Explain target market and target audience.<br>● Explain impacts of target market/target audience on web design.<br>● Identify importance of organizational structure<br>● Define information architecture.<br>● Explain web standards.<br>● Identify what web accessibility is.<br>● Provide examples of how people with disabilities access computers and other technologies, and the problems they may encounter when trying to access web content |
| **Supporting Standards:**<br><br>**Standard: BIT.IT.1:** Students will apply appropriate computer applications to meet personal and business needs. | |

| **Unit:** Coding- HTML: Structuring a Website | **Duration:** 3.5 Weeks |
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| **Unit Objectives (overarching objectives):**<br><br>Students learn about the language behind all websites: HTML. Students learn about several different HTML tags as well as the basic structure of a web page. Students use HTML to develop several of their own creative web pages. | |
| **Priority Standards:**<br><br>**Standard: BIT.DCM.1:** Students will create publish-quality media for intended audiences or purposes through the use of advanced layout, design, and graphics production software and hardware.<br><br>**Standard: BIT.IT.1:** Students will apply appropriate computer applications to meet personal and business needs. | **Learning Targets:**<br><br>● Explain how we build webpages<br>● Define markup languages<br>● Explain HTML<br>● IDentify the structure of HTML tags<br>● Explain HTML attributes and elements<br>● Identify the Anatomy of an HTML page<br>● Format text using HTML<br>● Embed hyperlinks and images using HTML<br>● Explain copyright fair use<br>● Create HTML lists<br>● Create HTML nesting tags<br>● Create HTML Tables<br>● Apply HTML styling attributes toad style to your webpages<br>● Apply HTML Colors<br>● Modify existing web pages using formatting tags to make text more readable |
| **Supporting Standards:** | |

| **Unit:** Coding- CSS: Designing Websites | **Duration:** 2.5 Weeks |
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| **Unit Objectives (overarching objectives):**<br><br>Students learn the language CSS and use it to style their webpages. Students learn about the | |

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| benefits of styling with CSS and will use CSS to create several styled webpages of their own. |

| **Priority Standards:** | **Learning Targets:** |
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| **Standard: BIT.DCM.1:** Students will create publish-quality media for intended audiences or purposes through the use of advanced layout, design, and graphics production software and hardware.<br><br>**Standard: BIT.IT.1:** Students will apply appropriate computer applications to meet personal and business needs. | ● Explain how we style web pages<br>● Identify the similarities and differences of CSS vs HTML<br>● Explain and apply CSS Selectors<br>● Select by tag<br>● Select by class<br>● Select by ID<br>● Explain and apply the cascade (order of selector precedence) |
| **Supporting Standards:** | |

| **Unit:** Google Sites: Internship Project | **Duration:** 1 Week |
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| **Unit Objectives (overarching objectives):**<br><br>Students will utilize a project based learning model to create a website as an intern for a hypothetical business. Students will learn how to use all the key features of Google Sites to create the site, duplicate and enhance the sections, add subpages to their site, add new section types and apply finishing touches to their site. | |
| **Priority Standards:** | **Learning Targets:** |
| **BIT.DCM.1:** Students will create publish-quality media for intended audiences or purposes through the use of advanced layout, design, and graphics production software and hardware.<br><br>**Standard: BIT.IT.1:** Students will apply appropriate computer applications to meet personal and business needs. | ● Create and build a website using Google Sites to include a homepage and other main pages.<br>● Identify and change theme<br>● Modify theme colors, font styles, sizes and colors and section backgrounds<br>● Insert and add images on websites<br>● Organize a website by adding pages, combining section elements, resizing page elements, adding pre-designed layouts, adding objects to placeholders, reordering sections, and |

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| | positioning objects<br>● Format text and text styles as well as text alignment and line spacing<br>● Add and manipulate text boxes<br>● Previewing a site and add collaborators<br>● Create, duplicate and delete sections that feature images, text, captions and embedded website links.<br>● Add and delete subpages to a website and new page elements like an image carousel and embedded files from Google Drive.<br>● Add Image Alt Text<br>● Add new section types such as dividers, collapsible text, and Google Maps, Youtube videos, announcements banners, footers and linking objects to site pages.<br>● Apply the finishing touches to a website by linking content and customizing the navigation before publishing your final site. |
| **Supporting Standards:** | |

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| **Unit:** Google Sites: Lead Web Designer Project | **Duration:** 2 Weeks |
| **Unit Objectives (overarching objectives):**<br><br>Students will utilize a project based learning model to create a website as a lead web designer for a hypothetical business. They will use the content and site requirements to create each page of their website and make decisions on the layout and design. Components of the project will include meeting their client and learning their background including their expectations for the completed site, planning and organizing the site, building the site and presenting their website to the client. | |

| **Priority Standards:** | **Learning Targets:** |
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| **BIT.DCM.1:** Students will create publish-quality media for intended audiences or purposes through the use of advanced layout, design, and graphics production software and hardware.<br><br>**Standard: BIT.IT.1:** Students will apply appropriate computer applications to meet personal and business needs. | ● Create a website with required pages, text, images, and other content to meet the clients' needs.<br>● Set up site navigation to include all appropriate pages and links to the correct locations.<br>● Utilize the client's logo and favicon correctly<br>● Set theme, colors, and font styles to accurately represent the goals and style of the client<br>● Design the layout of each page to be clear and uncluttered and ensure important information is easy to locate<br>● Utilize a variety of different layouts across different pages<br>● Ensure site is free of spelling, grammar, and punctuation errors<br>● Use text styles, formatting, and alignment to support the content of the site and highlight the most important information<br>● Link to internal and external pages<br>● Consider the size and placement of the images to support the content of the site<br>● Ensure images and content are displayed appropriately in Phone, Tablet, and Large screen preview modes<br>● Present your website to clients while carefully considering the purpose and audience of the presentation and tailor it to the clients' needs and perspective. |
| **Supporting Standards:** | |

## Accounting Unit

| **Unit:** 1 & 2 | **Duration:** 4 Weeks |
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**Unit Objectives:**

The students will construct financial statements and understand the basic accounting aspects like the accounting equation, assets, liabilities, etc.

| **Priority Standards:** | **Learning Targets:** |
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| **BIT.ACF.1.A.a.1:** Distinguish between the accrual basis of accounting and the cash basis of accounting and discuss the impact each has on financial statements.<br><br>**BIT.ACF.1.A.i.3:** Analyze and interpret business transactions and their effect on the accounting equation.<br><br>**BIT.ACF.2.A.b.1:** Define assets and identify various types.<br><br>**BIT.ACF.2.B.b.2:** Define liabilities and identify various types.<br><br>**BIT.ACF.2.C.b.1:** Define revenue.<br><br>**BIT.ACF.2.C.b.2:** Define expense.<br><br>**BIT.ACF.2.A.i.1:** Explain the purpose of notes receivable.<br><br>**BIT.ACF.2.B.i.2:** Explain the purpose of notes payable. | I can define and distinguish between the accrual basis of accounting and the cash basis of accounting.<br><br>I can discuss the impact of the accrual and cash basis of accounting on financial statements.<br><br>I can explain the purpose of each element of the financial statements: assets, liabilities, owner's equity, revenues, expenses, and net income/loss.<br><br>I can define the accounting equation (Assets = Liabilities + Owner's Equity).<br><br>I can analyze and interpret business transactions.<br><br>I can demonstrate how business transactions affect the accounting equation.<br><br>I can define assets.<br><br>I can identify and classify various types of assets (e.g., current assets, fixed assets, intangible assets).<br><br>I can explain the purpose of notes receivable.<br><br>I can define liabilities.<br><br>I can identify and classify various types of liabilities (e.g., current liabilities, long-term liabilities).<br><br>I can explain the purpose of notes payable.<br><br>I can define revenue. |

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| | I can define expenses.<br><br>I can differentiate between revenue and gains.<br><br>I can differentiate between expenses and losses.<br><br>I can explain how revenue and expenses contribute to net income/loss. |
| **Supporting Standards:**<br><br>**WCRS.CAR.2.D:** Explain how some high-leverage skills transfer across multiple career opportunities. | |

| **Unit:** 3 & 4 (10 & 11) | **Duration:** 5 Weeks (5 Weeks) |
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| **Unit Objectives:**<br><br>The students will learn to journalize and post to the ledger while being able to analyze financial statements to explain a company's current standing.<br><br>10 & 11: Students will add in merchandising items like cost of goods sold and inventory to the previous unit | |
| **Priority Standards:**<br><br>**BIT.ACF.2.B.a.1:** Journalize and post accounts payable transactions.<br><br>**BIT.ACF.1.A.i.2:** Discuss the purpose of the elements of the financial statements: assets, liabilities, owner's equity, revenues, expenses, and net income/loss. | **Learning Targets:**<br><br>I can define accounts payable and explain its role in a business.<br><br>I can identify the source documents used for accounts payable transactions (e.g., invoices, purchase orders, receiving reports).<br><br>I can accurately journalize a transaction to record the purchase of goods or services on credit.<br><br>I can accurately journalize a transaction to |

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| | record the payment of an accounts payable invoice.<br><br>I can post accounts payable transactions from the general journal to the general ledger.<br><br>I can calculate the current balance of an individual vendor's account in the accounts payable ledger.<br><br>I can apply proper debit and credit rules when journalizing accounts payable transactions.<br><br>I can define "financial statements" and list the three primary types.<br><br>I can define and explain the difference between net income and net loss.<br><br>I can explain how revenues and expenses affect a company's net income or loss.<br><br>I can explain the importance of each financial statement element for a business and its stakeholders (e.g., owners, investors, creditors).<br><br>I can identify and calculate cost of goods sold, inventory, and other merchandising factors (10 & 11 only) |
| **Supporting Standards:** | |

| **Unit:** Unit 5 (12) | **Duration:** 3 Weeks |
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| **Unit Objectives:**<br><br>Students will work on preparing trial balances to understand if they are recording entries properly, and will make proper adjustments to further develop financial statements.<br><br>(12): Students will do the same, but add in merchandising elements | |

| **Priority Standards:**<br><br>**BIT.ACF.2.A.i.3:** Identify and apply cash control techniques. | **Learning Targets:**<br><br>I can explain the importance of internal controls for protecting a business's cash.<br><br>I can describe at least three different methods for controlling cash receipts.<br><br>I can describe at least three different methods for controlling cash payments.<br><br>I can explain the purpose of a petty cash fund and the procedures for its use.<br><br>I can prepare a bank reconciliation to identify and correct discrepancies between a bank statement and a company's cash account.<br><br>I can explain the principle of segregation of duties as it applies to cash handling.<br><br>I can identify common risks or fraud related to a company's cash and explain how controls can mitigate those risks. |
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| **Supporting Standards:** | |

| **Unit:** Unit 6 (13) | **Duration:** 2 Weeks |
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| **Unit Objectives:**<br><br>Students are able to use an accounting work sheet to prepare trial balances and make adjusting entries.<br><br>(13): Students will do the same, but add in merchandising elements. | |
| **Priority Standards:**<br><br>**BIT.ACF.1.A.a.2:** Prepare a trial balance to determine necessary adjusting entries, | **Learning Targets:**<br><br>I can explain the purpose of an unadjusted trial balance as a tool to check for mathematical |

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| including accruals and deferrals.<br><br>**BIT.ACF.1.A.a.2:** Prepare a trial balance to determine necessary adjusting entries, including accruals and deferrals. | equality of debits and credits.<br><br>I can distinguish between an unadjusted and an adjusted trial balance.<br><br>I can identify which accounts on an unadjusted trial balance may require adjusting entries.<br><br>I can explain why adjusting entries are necessary to comply with the matching principle and the revenue recognition principle.<br><br>I can categorize common adjusting entries as either an accrual or a deferral.<br><br>I can explain how a trial balance is a foundational step in the accounting cycle for preparing financial statements. |
| **Supporting Standards:** | |

| **Unit:** Unit 7 (14) | **Duration:** 2 Weeks |
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| **Unit Objectives:**<br><br>Students are able to prepare financial statements from the accounting work sheet and interpret what they are saying about the business<br><br>(14): Students will do the same, but add in merchandising elements. Additionally, they will understand the classified balance sheet and classified income statement. | |
| **Priority Standards:**<br><br>**BIT.ACF.1.A.i.2:** Discuss the purpose of the elements of the financial statements: assets, liabilities, owner's equity, revenues, expenses, and net income/loss.<br><br>**BIT.ACF.3.B.a.3:** Evaluate financial statements using horizontal and vertical | **Learning Targets:**<br><br>I can define and explain the purpose of financial statement analysis.<br><br>I can calculate and interpret vertical analysis for an income statement and balance sheet.<br><br>I can calculate and interpret horizontal analysis |

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| analysis and commonly used financial ratios.<br><br>**BIT.EN.5.B.a.1:** Prepare basic financial statements: income statement, balance sheet, cash flow statement. | for an income statement and balance sheet.<br><br>I can calculate and explain the meaning of liquidity ratios (e.g., current ratio, quick ratio).<br><br>I can calculate and explain the meaning of profitability ratios (e.g., gross profit margin, net profit margin, return on assets).<br><br>I can calculate and explain the meaning of solvency ratios (e.g., debt-to-equity ratio).<br><br>I can use financial analysis to make a judgment about a company's financial health.<br><br>I can define and explain the purpose of an income statement.<br><br>I can prepare a multi-step income statement using a company's trial balance data.<br><br>I can define and explain the purpose of a balance sheet.<br><br>I can prepare a classified balance sheet using a company's trial balance data.<br><br>I can define and explain the purpose of a statement of cash flows.<br><br>I can explain how the three primary financial statements are interconnected. |
| **Supporting Standards:** | |

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| **Unit:** Unit 8 (15) | **Duration:** 2 Weeks |
| **Unit Objectives:**<br><br>Students can make adjustments and closing entries to close up the books over a period of | |

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| time.<br><br>(15): Students will do the same, but add in merchandising elements. | |
| **Priority Standards:**<br><br>**BIT.ACF.1.A.i.4:** Journalize and post adjusting and closing entries. | **Learning Targets:**<br><br>I can differentiate between a permanent account and a temporary account.<br><br>I can identify which accounts need to be "zeroed out" at the end of an accounting period.<br><br>I can prepare the specific adjusting entries for a variety of scenarios (e.g., depreciation, accrued salaries, prepaid expenses, unearned revenue).<br><br>I can journalize and post the four-step closing process.<br><br>I can post the adjusting entries from the general journal to the general ledger.<br><br>I can prepare a post-closing trial balance to verify that only permanent accounts have balances. |
| **Supporting Standards:** | |

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| **Unit:** Unit 9 | **Duration:** 2 Weeks |
| **Unit Objectives:**<br><br>Students can identify and organize new merchandising elements of a business including cost of goods sold, inventory, shipping/freight, and others while incorporating basic accounting principles | |
| **Priority Standards:** | **Learning Targets:** |

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| **BIT.ACF.2.A.a.2:** Compare and contrast inventory and costing procedures (periodic and perpetual).<br><br>**BIT.ACF.2.A.a.3:** Calculate and record depreciation and depletion. | I can differentiate between the periodic and perpetual inventory systems by explaining how each system tracks inventory levels and the cost of goods sold.<br><br>I can compare the advantages and disadvantages of periodic and perpetual inventory systems for a business.<br><br>I can calculate the cost of ending inventory and cost of goods sold using a periodic inventory system.<br><br>I can define and explain the purpose of depreciation as it relates to long-term assets.<br><br>I can calculate and record depreciation for a fixed asset using the straight-line method. |
| **Supporting Standards:** | |

## Building Wealth Unit

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| **Unit:** Taxes and Budgeting | **Duration:** 3 weeks |
| **Unit Objectives:**<br><br>Students will construct a budget and draw conclusions on the impact of taxes through an exam. | |
| **Priority Standard:**<br><br>**PFL.MM1.a.h: Personal Finance Literacy** Prepare a budget or spending plan that depicts varying sources of income, a planned saving strategy, taxes, and other sources of fixed and variable spending. | **Learning Targets:**<br><br>I can create a comprehensive budget that includes both fixed and variable expenses.<br><br>I can categorize and allocate income to various spending areas such as housing, utilities, groceries, transportation, and entertainment. |

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| **PFL.EE1.a.h: Personal Finance Literacy**<br>Evaluate a paycheck and how payroll taxes along with other deductions (e.g., insurance, retirement account, or flexible spending account for parking, childcare, and health) decrease net income. | I can calculate estimated taxes based on income and explain how taxes affect net income.<br><br>I can distinguish between fixed and variable expenses and their role in budgeting.<br><br>I can demonstrate how to prioritize fixed expenses while planning for variable ones in a budget. |
| **Supporting Standards:**<br><br>**WCRS.CAR.1.D:** Understand the impacts of earning potential and the total cost of education or training on a chosen career pathway.<br><br>**WCRS.CAR.4b.C:** Create a financial plan to support postsecondary education and training that includes a plan on how student loans will be repaid. | |

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| **Unit:** Health Insurance and its impact on Wealth | **Duration:** 4 week |
| **Unit Objectives:**<br><br>The students will analyze a health insurance scenario and create a budget that factors pre-tax deductions and their impact on taxes and net income through a scenario problem. | |
| **Priority Standards:**<br><br>**PFL.EE1.a.h: Personal Finance Literacy**<br>Evaluate a paycheck and how payroll taxes along with other deductions (e.g., insurance, retirement account, or flexible spending account for parking, childcare, and health) decrease net income. | **Learning Targets:**<br><br>I can understand the role of health insurance premiums as a payroll deduction and how they reduce taxes and net income.<br><br>I can explain the importance of health insurance in personal financial planning and how it fits into overall payroll deductions.<br><br>I can discuss the impact of not having health insurance on financial well-being and potential |

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| | medical expenses.<br><br>I can calculate net income after all applicable payroll taxes and deductions, with a specific focus on the health insurance deduction.<br><br>I can demonstrate the relationship between gross income, payroll taxes, health insurance premiums, and other voluntary deductions in determining final take-home pay. |
| **Supporting Standards:**<br><br>N/A | |

| **Unit:** Investing | **Duration:** 5 Weeks |
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| **Unit Objectives:**<br><br>The students will prove they understand the tenants of compound interest, pre- and post-tax investing, and different risk portfolios through problem-based scenarios | |
| **Priority Standards:**<br><br>**PFL.SI2.e.h:** Compare and contrast the advantages of taxable, tax deferred and tax-advantaged investments for new savers, including Roth IRAs and employer-sponsored retirement vehicles.<br><br>**PFL.SI2.a.h:** Evaluate the effect of compounding earned interest on investments.<br><br>**PFL.SI2.a.h:** Compute time value of money (TVM) principles (e.g., compound interest or Rule of 72).<br><br>**PFL.SI2.d.h:** Assess the long-term investment potential associated with the | **Learning Targets:**<br><br>I can explain how tax-deferred accounts, such as traditional IRAs and 401(k)s, work and their benefits.<br><br>I can describe the mechanics and benefits of tax-advantaged accounts, specifically Roth IRAs.<br><br>I can analyze and evaluate the benefits of employer-sponsored retirement plans (e.g., 401(k), 403(b)) for new savers.<br><br>I can define compound interest and explain how it works.<br><br>I can demonstrate how compound interest |

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| stock market, focusing on fundamentals such as diversification, risk-reward, dollar cost averaging, and investor behavior. | affects investment growth over time.<br><br>I can explain the long-term benefits of starting to invest early due to the power of compounding.<br><br>I can apply the Rule of 72 to estimate the doubling time of an investment. |
| **Supporting Standards:**<br><br>**WCRS.CAR.4b.B:** Know the financial resources available that support postsecondary educational goals. | |

| **Unit:** Assets and Liabilities | **Duration:** 5 weeks |
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| **Unit Objectives:**<br><br>The students will compare and contrast different assets and liabilities and their impact on wealth. | |
| **Priority Standards:**<br><br>**PFL.SI2.a.h:** Explain the role of revenue generating assets in building net worth (e.g., real estate or entrepreneurship).<br><br>**PFL.SI2.c.h:** Assess various means of building net worth.<br><br>**PFL.SI2.c.h:** Evaluate factors that influence financial investment planning (e.g., age, income, liabilities, assets, goals, family size, or risk tolerance). | **Learning Targets:**<br><br>I can define revenue-generating assets and explain their role in building net worth.<br><br>I can identify and describe various types of revenue-generating assets, including real estate and entrepreneurial ventures.<br><br>I can analyze the potential risks and rewards associated with real estate investments.<br><br>I can define net worth and explain its significance in financial planning.<br><br>I can calculate net worth using the formula: Assets - Liabilities = Net Worth.<br><br>I can assess various means of building net |

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| | worth, including saving, investing, and asset acquisition.<br><br>I can analyze the impact of different financial decisions on net worth.<br><br>I can define liabilities and explain their impact on personal finances.<br><br>I can differentiate between current (short-term) and long-term liabilities.<br><br>I can calculate my total liabilities and understand their relationship to my assets and net worth. |
| **Supporting Standards:**<br><br>**WCRS.LIF.1.D:** Acquire the habits, skills, and mindsets that form the basis for academic and career success, including the use of digital tools. | |

# Middle School Tech Ed Curriculum

## 6th Grade Tech. Ed.

| **Unit 1:** Measurement | **Duration:** 6 days |
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| **Unit Objective:**<br><br>Students will understand how to read a standard ruler down to 1/16th of an inch. | |
| **Priority Standards:**<br><br>● **TE.AC.2.C.i.4:** Demonstrate use of the standard measuring system to the | **Learning Targets ("I Can" Statements):**<br><br>● I can identify the basic components of a standard ruler, including the whole |

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| 1/16” and be able to convert to decimal and metric equivalency<br><br>● **TE.AC.2.C.i.5:** Add, subtract, multiply, and divide fractions and mixed numbers.<br><br>● **TE.BB.2.B.i.2:** Use appropriate tools to measure and lay out a piece of material within tolerances, including length, width, thickness, angles, circles, arcs, and volume. | inch marks, half-inch marks, quarter-inch marks, eighth-inch marks, and sixteenth-inch marks.<br><br>● I can locate and read whole numbers on the ruler to represent whole inches.<br><br>● I can differentiate between the various fractional markings by their size. For example, the longest line between whole inches represents 1/2 inch, the next longest represents 1/4 inch, the third longest represents 1/8 inch, and the shortest lines represent 1/16 inch.<br><br>● I can reduce fractional measurements to their simplest form. For example, students should recognize that 8/16 of an inch is the same as 1/2 of an inch, and 4/16 is the same as 1/4. This demonstrates a complete understanding of the ruler's markings and fractions.<br><br>● I can accurately determine the length of an object by combining the whole inches with the final fractional measurement. For example, if an object ends at the fourth small mark after the 3-inch line, the measurement is 3 and 4/16 inches, which simplifies to 3 and 1/4 inches. |
| **Supporting Standards:**<br><br>● **TE.AC.2.C.i.3:** Demonstrate basic dimensioning skills including the use of dimension, extension, center, and leader lines | |

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| **Unit 2:** Safety | **Duration:** 5 days |
| **Unit Objective:** | |

Students will learn about and how to safely use various woodworking hand tools and some power tools including drill presses, disc sanders and spindle sanders.

| **Priority Standards:** | **Learning Targets (“I Can” Statements):** |
| --- | --- |
| ● **TE.AC.2.A.i.1:** Demonstrate proficiency in the use of simple hand tools such as hammers, screwdrivers, handsaws, planes, sandpaper, nail sets, aviation snips, framing squares, utility knives, chalk lines, etc.<br><br>● **TE.AC.2.A.i.2:** Demonstrate the safe and proper use of all applicable power tools, such as circular saws, table saws, saber saws, drills, planers, sanders, pneumatic nail guns, and impact wrenches. | ● I can explain the purpose of machine guards and the rule to "never operate a machine without the guard in place and working."<br>● Students will be able to identify the appropriate PPE for a given task (e.g., safety glasses for all tool use, hearing protection for loud machinery)<br>● Students will be able to demonstrate the correct way to wear and maintain PPE.<br>● Students will understand the importance of securing loose clothing, jewelry, and long hair.<br>● Students will demonstrate safe work area habits, such as keeping the area clean and organized<br>● Students will be able to demonstrate an understanding of the "right tool for the job" principle.<br>● Students will know how to report a damaged tool, a malfunctioning machine, or a hazardous situation.<br>● Students will understand the importance of not distracting or being distracted by others while operating tools.<br>● Students will be able to select the correct hand tool for a specific task (e.g., using a screwdriver for a screw, not a chisel).<br>● Students will know to return tools to their designated storage location after each use.<br>● Students will know to wait for a spinning blade or bit to come to a complete stop before making adjustments, cleaning, or changing accessories. |

**Supporting Standards:**

- **TE.MFG.2.A.i.1:** Identify health and safety procedures in the workplace that keep workers safe.

| **Unit 3:** Bridge Construction | **Duration**: 14 days |
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| **Unit Objective:**<br><br>Students will learn about different principals of force and how they relate to bridges, they will design and build a model bridge using hand tools. The bridge will then be strength tested. | |
| **Priority Standards:**<br><br>● **TE.BB.2.B.i.1:** Students will describe how resources are the things needed to complete a task, including tools, machines, materials, information, energy, people, capital, and time.<br><br>● **TE.BB.2.F.i.2:** Use scientific inquiry to test, collect data, and make conclusions about the performance of different materials and their application in the making of structures, for example, tensile, compression, shear testing.<br><br>● **TE.AC.2.A.i.1:** Demonstrate proficiency in the use of simple hand tools such as hammers, screwdrivers, handsaws, planes, sandpaper, nail sets, aviation snips, framing squares, utility knives, chalk lines, etc. | **Learning Targets ("I Can" Statements):**<br><br>● I can define the problem: Clearly state the goal, criteria (e.g., must span a certain distance), and constraints (e.g., limited inches of wood, amount of glue).<br><br>● I can brainstorm & plan: Sketch multiple design ideas, research different types of truss bridges (e.g., Warren, Pratt), and select a design based on a logical rationale.<br><br>● I can build & create: Follow a plan to construct a bridge, making precise cuts and using proper gluing techniques to ensure strong joints.<br><br>● I can test & evaluate: Systematically test the bridge's strength by gradually adding weight and recording the results.<br><br>● I can explain key forces: Define and identify the concepts of tension (pulling force) and compression (pushing force) within their bridge structure. |

**Supporting Standards:**

- **TE.BB.2.B.i.2:** Use appropriate tools to measure and lay out a piece of material within tolerances, including length, width, thickness, angles, circles, arcs, and volume

| **Unit 4:** Wooden Toy Construction | **Duration**: 14 days |
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| **Unit Objective:**<br><br>Students will build a wooden toy that meets certain guidelines using hand and power tools. | |
| **Priority Standards:**<br><br>● **TE.AC.2.A.i.1:** Demonstrate proficiency in the use of simple hand tools such as hammers, screwdrivers, handsaws, planes, sandpaper, nail sets, aviation snips, framing squares, utility knives, chalk lines, etc.<br><br>● **TE.AC.2.A.i.2:** Demonstrate the safe and proper use of all applicable power tools, such as circular saws, table saws, saber saws, drills, planers, sanders, pneumatic nail guns, and impact wrenches. | **Learning Targets ("I Can" Statements):**<br><br>● I can follow general shop safety rules, including keeping the work area clean, not running or engaging in horseplay, and reporting any broken tools or unsafe conditions to the instructor.<br><br>● I can select the appropriate tool for a specific task, such as using a hand saw for cutting and a screwdriver for fastening. |
| **Supporting Standards:**<br><br>● **TE.BB.3.A.b.2:** Identify personal protective equipment (PPE) and personal and group safety precautions that are critical to worker well-being. | |

## 7th Grade Tech. Ed.

<table>
<tr><td>Unit 1: Measurement</td><td>Duration: 4 days</td></tr>
<tr><td colspan="2">Unit Objective:<br><br>Students will understand how to read a standard ruler down to 1/16th of an inch.</td></tr>
<tr><td>Priority Standards:<br><br>● TE.AC.2.C.i.4: Demonstrate use of the standard measuring system to the 1/16” and be able to convert to decimal and metric equivalency.<br><br>● TE.AC.2.C.i.5: Add, subtract, multiply, and divide fractions and mixed numbers.<br><br>● TE.BB.2.B.i.2: Use appropriate tools to measure and lay out a piece of material within tolerances, including length, width, thickness, angles, circles, arcs, and volume.</td><td>Learning Targets (“I Can” Statements):<br><br>● I can identify the basic components of a standard ruler, including the whole inch marks, half-inch marks, quarter-inch marks, eighth-inch marks, and sixteenth-inch marks.<br><br>● I can locate and read whole numbers on the ruler to represent whole inches.<br><br>● I can differentiate between the various fractional markings by their size. For example, the longest line between whole inches represents 1/2 inch, the next longest represents 1/4 inch, the third longest represents 1/8 inch, and the shortest lines represent 1/16 inch.<br><br>● I can reduce fractional measurements to their simplest form. For example, students should recognize that 8/16 of an inch is the same as 1/2 of an inch, and 4/16 is the same as 1/4. This demonstrates a complete understanding of the ruler's markings and fractions.<br><br>● I can accurately determine the length of an object by combining the whole inches with the final fractional measurement. For example, if an object ends at the fourth small mark after the 3-inch line, the measurement is 3 and 4/16 inches, which simplifies to 3 and 1/4 inches.</td></tr>
</table>

**Supporting Standards:**

- **TE.AC.2.C.i.3:** Demonstrate basic dimensioning skills including the use of dimension, extension, center, and leader lines.

| **Unit 2:** Safety | **Duration:** 5 days |
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| **Unit Objective:**<br><br>Students will learn about and how to safely use various woodworking hand tools and some power tools including the drill press, miter saw, edge sander, and band saw. | |
| **Priority Standards:**<br><br>● **TE.AC.2.A.i.1:** Demonstrate proficiency in the use of simple hand tools such as hammers, screwdrivers, handsaws, planes, sandpaper, nail sets, aviation snips, framing squares, utility knives, chalk lines, etc.<br><br>● **TE.AC.2.A.i.2:** Demonstrate the safe and proper use of all applicable power tools, such as circular saws, table saws, saber saws, drills, planers, sanders, pneumatic nail guns, and impact wrenches. | **Learning Targets ("I Can" Statements):**<br><br>● I can explain the purpose of machine guards and the rule to "never operate a machine without the guard in place and working."<br><br>● Students will be able to identify the appropriate PPE for a given task (e.g., safety glasses for all tool use, hearing protection for loud machinery)<br><br>● Students will be able to demonstrate the correct way to wear and maintain PPE.<br><br>● Students will understand the importance of securing loose clothing, jewelry, and long hair.<br><br>● Students will demonstrate safe work area habits, such as keeping the area clean and organized.<br><br>● Students will be able to demonstrate an understanding of the "right tool for the job" principle.<br><br>● Students will know how to report a |

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| | damaged tool, a malfunctioning machine, or a hazardous situation.<br><br>● Students will understand the importance of not distracting or being distracted by others while operating tools.<br><br>● Students will be able to select the correct hand tool for a specific task (e.g., using a screwdriver for a screw, not a chisel).<br><br>● Students will know to return tools to their designated storage location after each use.<br><br>● Students will know to wait for a spinning blade or bit to come to a complete stop before making adjustments, cleaning, or changing accessories. |
| **Supporting Standards:**<br><br>● **TE.MFG.2.A.i.1:** Identify health and safety procedures in the workplace that keep workers safe. | |

| **Unit 3:** CO2 Car Construction | **Duration**: 12 days |
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| **Unit Objective:**<br><br>Students will design, create and test a CO2 powered race car. | |
| **Priority Standards:**<br><br>● **TE.AC.2.A.i.2:** Demonstrate the safe and proper use of all applicable power tools, such as circular saws, table saws, saber saws, drills, planers, | **Learning Targets ("I Can" Statements):**<br><br>● I can accurately measure and mark a block of wood to 1/16th of an inch using a ruler or tape measure. This ensures their car body meets |

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| sanders, pneumatic nail guns, and impact wrenches.<br><br>● **TE.AC.2.A.i.1:** Demonstrate proficiency in the use of simple hand tools such as hammers, screwdrivers, handsaws, planes, sandpaper, nail sets, aviation snips, framing squares, utility knives, chalk lines, etc.<br><br>● **TE.AC.2.C.i.4:** Demonstrate use of the standard measuring system to the 1/16” and be able to convert to decimal and metric equivalency.<br><br>● **TE.BB.2.B.i.2:** Use appropriate tools to measure and lay out a piece of material within tolerances, including length, width, thickness, angles, circles, arcs, and volume. | guidelines and the axle holes and co2 camber are correctly placed.<br><br>● I can safely operate woodworking tools such as a band saw, drill press, and miter saw.<br><br>● I can measure the time it takes for their car to travel a specific distance.<br><br>● I can identify and use personal protective equipment (PPE), such as safety glasses, at all times while in the workshop.<br><br>● I can complete a project from start to finish, showing craftsmanship and attention to detail in their final product. |
| **Supporting Standards:**<br><br>● **TE.MFG.2.A.i.1:** Identify health and safety procedures in the workplace that keep workers safe. | |

| **Unit 4:** Tic Tac Toe Board Project | **Duration**: 12 days |
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| **Unit Objective:**<br><br>Students will make a tic tac toe board which will allow them to apply digital design skills to create a physical object, reinforcing concepts of precision, material properties, and the modern manufacturing process. | |
| **Priority Standards:**<br><br>● **TE.MFG.2.D.i.1:** Demonstrate the ability to identify, program, and use an automated system to complete a given task. | **Learning Targets (“I Can” Statements):**<br><br>● I can create a digital design for a tic-tac-toe board using a graphic design program. This includes accurately drawing the game grid and |

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| • **TE.BB.2.B.b.1:** Explain that tools are used to design, make, use, assess technology, and extend human capabilities such as holding, lifting, carrying, fastening, separating, and computing.<br><br>• **TE.AC.2.A.i.2:** Demonstrate the safe and proper use of all applicable power tools, such as circular saws, table saws, saber saws, drills, planers, sanders, pneumatic nail guns, and impact wrenches.<br><br>• **TE.AC.2.A.i.1:** Demonstrate proficiency in the use of simple hand tools such as hammers, screwdrivers, handsaws, planes, sandpaper, nail sets, aviation snips, framing squares, utility knives, chalk lines, etc. | custom designs for the 'X' and 'O' pieces.<br><br>• I can prepare the design file for the laser engraver by properly formatting the file with correct line weights and colors to distinguish between cutting and engraving lines.<br><br>• I can explain the function of a laser engraver and how it translates a digital design into a physical object with high precision.<br><br>• I can measure and cut the wood to the correct dimensions for the game board using a traditional saw.<br><br>• I can assemble the finished pieces, which may include a small box or frame to hold the pieces, ensuring all components fit together correctly.<br><br>• I can communicate the entire process, from the initial digital design to the final physical product, highlighting the advantages of using technology in manufacturing. |
| **Supporting Standards:**<br><br>• **TE.AC.2.C.i.4:** Demonstrate use of the standard measuring system to the 1/16” and be able to convert to decimal and metric equivalency. | |

## 8th Grade Tech. Ed.

<table>
<tr><td>Unit 1: Measurement</td><td>Duration: 3 days</td></tr>
<tr><td colspan="2">Unit Objective:<br><br>Students will understand how to read a standard ruler down to 1/16th of an inch.</td></tr>
<tr><td>Priority Standards:<br><br>● TE.AC.2.C.i.4: Demonstrate use of the standard measuring system to the 1/16” and be able to convert to decimal and metric equivalency.<br><br>● TE.AC.2.C.i.5: Add, subtract, multiply, and divide fractions and mixed numbers.<br><br>● TE.BB.2.B.i.2: Use appropriate tools to measure and lay out a piece of material within tolerances, including length, width, thickness, angles, circles, arcs, and volume.</td><td>Learning Targets (“I Can” Statements):<br><br>● I can identify the basic components of a standard ruler, including the whole inch marks, half-inch marks, quarter-inch marks, eighth-inch marks, and sixteenth-inch marks.<br><br>● I can locate and read whole numbers on the ruler to represent whole inches.<br><br>● I can differentiate between the various fractional markings by their size. For example, the longest line between whole inches represents 1/2 inch, the next longest represents 1/4 inch, the third longest represents 1/8 inch, and the shortest lines represent 1/16 inch.<br><br>● I can reduce fractional measurements to their simplest form. For example, students should recognize that 8/16 of an inch is the same as 1/2 of an inch, and 4/16 is the same as 1/4. This demonstrates a complete understanding of the ruler's markings and fractions.<br><br>● I can accurately determine the length of an object by combining the whole inches with the final fractional measurement. For example, if an object ends at the fourth small mark after the 3-inch line, the measurement is 3 and 4/16 inches, which simplifies to 3 and 1/4 inches.</td></tr>
</table>

**Supporting Standards:**

- **TE.AC.2.C.i.3:** Demonstrate basic dimensioning skills including the use of dimension, extension, center, and leader lines

| **Unit 2:** Safety | **Duration:** 8 days |
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| **Unit Objective:**<br><br>Students will learn about and how to safely use various woodworking hand tools and some power tools including the table saw, jointer, band saw, miter saw power sanders and others. | |
| **Priority Standards:**<br><br>● **TE.AC.2.A.i.1:** Demonstrate proficiency in the use of simple hand tools such as hammers, screwdrivers, handsaws, planes, sandpaper, nail sets, aviation snips, framing squares, utility knives, chalk lines, etc.<br><br>● **TE.AC.2.A.i.2:** Demonstrate the safe and proper use of all applicable power tools, such as circular saws, table saws, saber saws, drills, planers, sanders, pneumatic nail guns, and impact wrenches. | **Learning Targets ("I Can" Statements):**<br><br>● I can explain the purpose of machine guards and the rule to "never operate a machine without the guard in place and working."<br><br>● Students will be able to identify the appropriate PPE for a given task (e.g., safety glasses for all tool use, hearing protection for loud machinery).<br><br>● Students will be able to demonstrate the correct way to wear and maintain PPE.<br><br>● Students will understand the importance of securing loose clothing, jewelry, and long hair.<br><br>● Students will demonstrate safe work area habits, such as keeping the area clean and organized.<br><br>● Students will be able to demonstrate an understanding of the "right tool for the job" principle.<br><br>● Students will know how to report a |

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| | damaged tool, a malfunctioning machine, or a hazardous situation.<br><br>● Students will understand the importance of not distracting or being distracted by others while operating tools.<br><br>● Students will be able to select the correct hand tool for a specific task (e.g., using a screwdriver for a screw, not a chisel).<br><br>● Students will know to return tools to their designated storage location after each use.<br><br>● Students will know to wait for a spinning blade or bit to come to a complete stop before making adjustments, cleaning, or changing accessories. |
| **Supporting Standards:**<br><br>● **TE.MFG.2.A.i.1:** Identify health and safety procedures in the workplace that keep workers safe. | |

| **Unit 3:** Push Stick Project | **Duration**: 7 days |
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| **Unit Objective:**<br><br>Students will apply fundamental woodworking principles and safety protocols to create an essential shop safety tool. Students will learn to measure, cut, and shape wood with precision while gaining a deeper understanding of the importance of safety in a woodworking environment. | |
| **Priority Standards:**<br><br>● **TE.BB.2.B.i.2:** Use appropriate tools | **Learning Targets ("I Can" Statements):**<br><br>● I can explain the purpose of a push |

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| to measure and lay out a piece of material within tolerances, including length, width, thickness, angles, circles, arcs, and volume.<br><br>● **TE.AC.2.A.i.2:** Demonstrate the safe and proper use of all applicable power tools, such as circular saws, table saws, saber saws, drills, planers, sanders, pneumatic nail guns, and impact wrenches.<br><br>● **TE.MFG.2.A.i.1:** Identify health and safety procedures in the workplace that keep workers safe. | stick, which is to keep hands and fingers a safe distance away from saw blades and cutters.<br><br>● I can identify the specific machines where a push stick should be used, such as the table saw and jointer.<br><br>● I can accurately measure and mark a piece of wood for the push stick's dimensions (e.g., length, handle location, and notch depth) to the nearest 1/16 of an inch.<br><br>● I can properly sand and finish the push stick to remove rough spots and create a smooth, comfortable tool. |
| **Supporting Standards:**<br><br>● **TE.BB.2.B.i.1:** Students will describe how resources are the things needed to complete a task, including tools, machines, materials, information, energy, people, capital, and time.<br>● **TE.AC.2.A.i.1:** Demonstrate proficiency in the use of simple hand tools such as hammers, screwdrivers, handsaws, planes, sandpaper, nail sets, aviation snips, framing squares, utility knives, chalk lines, etc. | |

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| **Unit 4:** Wall Shelf Project | **Duration**: 20 days |
| **Unit Objective:**<br><br>Students will apply fundamental woodworking skills and safety protocols to design, measure, cut, and assemble a functional project. Students will progress from understanding basic concepts to independently completing a small-scale construction project. | |
| **Priority Standards:**<br><br>● **TE.BB.2.B.i.1:** Students will describe how resources are the things needed to complete a task, including tools, | **Learning Targets (“I Can” Statements):**<br><br>● I can accurately measure and mark wood for cutting using a tape measure and a square, ensuring all pieces are |

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| machines, materials, information, energy, people, capital, and time.<br><br>● **TE.BB.2.B.i.2:** Use appropriate tools to measure and lay out a piece of material within tolerances, including length, width, thickness, angles, circles, arcs, and volume.<br><br>● **TE.AC.2.A.i.2:** Demonstrate the safe and proper use of all applicable power tools, such as circular saws, table saws, saber saws, drills, planers, sanders, pneumatic nail guns, and impact wrenches. | the correct dimensions.<br><br>● I can follow a project plan or blueprint, interpreting dimensions and assembly instructions to properly lay out all components before cutting.<br><br>● I can demonstrate precision by checking cuts for squareness and fit, making adjustments as needed.<br><br>● I can safely operate key woodworking tools such as a miter saw, a hand saw, and a drill.<br><br>● I can select the appropriate tool for each task, from cutting and shaping to assembly and finishing.<br><br>● I can use fasteners correctly, understanding the difference between wood screws and nails and when to use each for a strong, stable shelf.<br><br>● I can apply sanding techniques to prepare the wood for finishing, ensuring all surfaces are smooth and free of burrs. |

**Supporting Standards:**

- **TE.MFG.2.A.i.1:** Identify health and safety procedures in the workplace that keep workers safe.
- **TE.BB.3.A.b.1:** Predict in a workplace environment the conditions and hazards that pose a risk for accidents and injuries, and discuss the importance of health and safety procedures in a workplace that keeps workers safe.

# High School Tech Ed Curriculum

## TECHNOLOGY EDUCATION

**MISSION STATEMENT**

The focus is exploratory in nature providing students with the knowledge, experience, and hands-on training in Technology and Industry. Students will learn to apply academic principles that can be put to use in their personal lives. These are project-based courses that will enable students to make educated career choices.

**BROAD GOALS**

Quality Technology and Industry in the School District of Holmen includes the following goals:

**Goal 1** To explore interests and opportunities related to Technical Education and to better understand
technology as a tool of production.

**Goal 2** To enhance student mastery of basic education through the application of mathematics, science, social
studies, communication, technology, and computer literacy.

**Goal 3** To assist students in becoming independent learners and creative problem-solvers possessing
self-confidence and self-reliance.

**Goal 4** To assist students to explore, assess, and prepare for current and emerging occupations and to develop a
The technological base for life-long learning.

**Goal 5** To prepare students for vocational entry-level employment and post-secondary training.

**Goal 6** Develop relationships with area business and industry and an understanding of the relationship between
individuals and society.

## COLLEGE CREDIT OPTION-TRANSCRIPTED CREDIT

Western Technical College

College credit agreements are in place between Holmen High School and the Wisconsin Technical College System and UW system whereby a student will receive Wisconsin Technical College System credit for courses taken while in high school. There is no additional fee for these credits.

**Western Technical College Credit Opportunities for Technology Education Classes taken at HHS**

| **HHS Class** | **Western Class and Credits Earned** |
|---|---|
| Auto Service 1 S1 & S2 **(TC)** | Basic Maintenance (3 credits) |
| Auto Service 2 S1 & S2 **(TC)** | Intro to Automotive Technology (3 credits) |
| Hot Metals 1 **(TC)** | Introduction to Welding (1 credit) |
| Hot Metals 2 **(TC)** | Welding-Oxy-Fuel Metals Cutting (1 credit)<br>Welding Transportation (1 credit) |
| Digital Photography/Adobe Photoshop **(TC)** | Digital Photography/Adobe Photoshop (6 credits) |
| | |

Chippewa Valley Technical College

**Chippewa Valley Technical College Credit Opportunities for Technology Education Classes taken at HHS**

| **HHS Class** | **CVTC Class and Credits Earned** |
|---|---|
| Ag Mechanics & Small Engines (TC) | Engine Theory 1A (1 Credit) |

**Please note:** Students that earn a "C" or higher (on Western/CVTC's grading scale) AND complete all of the post secondary course competencies will earn both high school and college credit for the course. College credit earned is at no cost to the student.

## TECHNOLOGY EDUCATION

| Course | Pre-Req/Notes | Credit | Grade Level | | | |
|---|---|---|---|---|---|---|
| | | | 9 | 10 | 11 | 12 |
| **Level 1 (Introductory Course)** | | | | | | |
| Intro to Technology | | .5 | E | | | |
| **Level 1** | | | | | | |
| Ag Mechanics & Small Engines (TC) | | .5 | E | E | E | E |
| Basic Home & Auto Care | | .5 | E | E | E | E |
| Building Construction 1 | Yes | .5 | E | E | E | E |
| Electronics 1 | Yes | .5 | E | E | E | E |
| Graphic Design 1 | Yes | .5 | E | E | E | E |
| Hot Metals 1 **(TC)** | Yes | .5 | E | E | E | E |
| Intro to Engineering | Yes | .5 | E | E | E | E |
| Machine Shop 1 | Yes | .5 | E | E | E | E |
| Intro. to Digital Photography & Adobe Photoshop | Yes | .5 | E | E | E | E |
| Robotics | Yes | .5 | E | E | E | E |
| Intro to TV Production | Yes | .5 | E | E | E | E |
| Woods 1 | Yes | .5 | E | E | E | E |
| Basic Auto Maintenance | Yes | .5 | E | E | E | E |
| **Level 2** | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| TV Production | Yes | .5 | E | E | E | E |
| Auto Service 1 S1 & S2 **(TC)** | Yes | 1 | | E | E | E |
| Auto Service 2 S1 & S2 **(TC)** | Yes | 1 | | E | E | E |
| Building Construction 2 | Yes | .5 | | E | E | E |
| Digital Photography & Adobe Photoshop **(TC)** | Yes | .5 | E | E | E | E |
| Electronics 2 | Yes | .5 | E | E | E | E |
| Graphic Design 2 | Yes | .5 | E | E | E | E |
| Hot Metals 2 **(TC)** | Yes | .5 | E | E | E | E |
| Machine Shop 2 | Yes | .5 | E | E | E | E |
| Woods 2 | Yes | .5 | | E | E | E |
| **Level 3 & 4** | | | | | | |
| Youth Apprenticeship – Architecture & Construction | Meet the criteria of the application. | 2 | | | E | E |
| Youth Apprenticeship - Manufacturing | Meet the criteria of the application. | 2 | | | E | E |
| Youth Apprenticeship – STEM | Meet the criteria of the application. | 2 | | | E | E |
| Youth Apprenticeship - Transportation | Meet the criteria of the application. | 2 | | | E | E |
| Youth Apprenticeship: Arts, Audio Visual Tech | Meet the criteria of the application | 2 | | | E | E |
| Youth Apprenticeship: Information Technology | Meet the criteria of the application | 2 | | | E | E |
| Capstone: Technology Education | Meet the criteria of the application. | .5 or 1 | | | | E |

**TC = Transcripted Credit;** E=Elective and the year student is eligible to take the course

## Digital Photography and Photoshop

| **Unit 7:** Portrait Photography / Typography & Text Design | **Duration:** 3 Weeks |
|---|---|
| **Unit Objectives:**<br><br>● Students will capture portraits using proper lighting and edit them in Photoshop.<br>● Design typographic layouts using Photoshop text tools.<br>● Create text effects such as type on a path and clipping masks.<br>● Produce professional poster designs integrating text and images. | |
| **Priority Standards:**<br><br>● **TE.ICT.2.C** – Use photographic technologies for specific types of photography.<br>● **TE.ICT.2.B** – Apply Photoshop tools for portrait retouching.<br>● **TE.ICT.2.D** – (Demonstrate digital media skills) | **Learning Targets ("I Can" Statements):**<br><br>● I can set up and adjust lighting for portrait shots.<br>● I can use Photoshop to remove blemishes and enhance skin tones.<br>● I can frame and compose portraits effectively.<br>● Use Character/Paragraph panels effectively.<br>● Create text paths and clipping masks. |
| **Supporting Standards:**<br><br>● **TE.ICT.2.A** – Identify techniques that improve visual communication.<br>● **TE.ICT.2.C** – (Apply creativity and innovation using technology)<br>● **TE.ICT.2.F** – (Use digital media for communication) | |

| **Unit 8:** Product & Advertising Photography / Composite Image Creation | **Duration:** 3 Weeks |
|---|---|
| **Unit Objectives:**<br><br>● Students will create images for commercial use and refine them for marketing.<br>● Create composite images using multiple photos and layers. | |

- Apply filters and blending modes for seamless integration.
- Adjust perspective and lighting for realism.

| **Priority Standards:** | **Learning Targets ("I Can" Statements):** |
|---|---|
| ● **TE.ICT.2.C** – Use photographic techniques for product presentation.<br>● **TE.ICT.2.B** – Apply Photoshop for product retouching and background removal. | ● I can light products to minimize shadows and enhance detail.<br>● I can remove backgrounds and apply drop shadows in Photoshop.<br>● I can produce images suitable for marketing materials. |

**Supporting Standards:**

- **TE.ICT.2.A** – Evaluate how product images influence consumer perception.
- **TE.ICT.2.C** – Use photographic techniques for product presentation.

| **Unit 9:** Low Light & Night Photography / Filters, Effects & Painting Tools | **Duration:** 3 Weeks |
|---|---|

**Unit Objectives:**

- Students will master long-exposure photography and noise reduction techniques.
- Apply artistic filters and special effects.
- Utilize Mixer Brush and custom brushes for digital painting.
- Create original textures and patterns.

| **Priority Standards:** | **Learning Targets ("I Can" Statements):** |
|---|---|
| ● **TE.ICT.2.C** – Analyze and use photographic technologies.<br>● **TE.ICT.2.B** – Utilize editing software. | ● I can capture photos in low-light using appropriate settings.<br>● I can reduce noise and enhance night photos in Photoshop.<br>● Use Filter Gallery, smart filters, blur, sharpen tools.<br>● Use Mixer Brush and brush presets. |

**Supporting Standards:**

- **TE.ICT.2.A** – Understand purposes of visual communication.
- **TE.ICT.2.C** – Use photographic techniques for product presentation.

| **Unit 10:** Storytelling with Photography / Advanced Selections & Masks | **Duration:** 3 Weeks |
|---|---|
| **Unit Objectives:**<br><br>● Students will create a photo series that conveys a theme or narrative.<br>● Master advanced selection and masking techniques.<br>● Refine masks using Select and Mask workspace.<br>● Manipulate images with Puppet Warp and advanced masking. | |
| **Priority Standards:**<br><br>● **TE.ICT.2.B** – Utilize editing software.<br>● **TE.ICT.2.C** – Analyze and use photographic technologies.<br>● **TE.ICT.2.D** – (Digital media skills) | **Learning Targets ("I Can" Statements):**<br><br>● I can plan and shoot a cohesive series of images.<br>● I can edit for consistent tone and style in Photoshop.<br>● Use Select and Mask tools to create clean edges.<br>● Use Puppet Warp for image manipulation. |
| **Supporting Standards:**<br><br>● **TE.ICT.2.A** – Understand purposes of visual communication.<br>● **TE.ICT.2.A** – Identify techniques that improve visual communication. | |

| **Unit 11:** Final Photo Portfolio / Professionalism & Portfolio Development | **Duration:** 3 Weeks |
|---|---|
| **Unit Objectives :** | |

<table>
<tr><td colspan="2">

- Students will compile their best work, demonstrating technical and creative growth.
- Compile a digital portfolio of best work.
- Develop professional communication and presentation skills.
- Practice workplace professionalism and collaboration.

</td></tr>
<tr><td>

**Priority Standards:**

- **TE.ICT.2.B** – Utilize editing software.
- **TE.ICT.2.C** – Analyze and use photographic technologies.

</td><td>

**Learning Targets:**

- I can select and present my strongest photographs.
- I can prepare images for print and digital display.
- Organize files and create portfolio presentation.
- Present design rationale and accept feedback

</td></tr>
<tr><td colspan="2">

**Supporting Standards:**

- **TE.ICT.2.A** – Understand purposes of visual communication.

</td></tr>
</table>

<table>
<tr><td>

**Unit 12:** Careers in Information & Communication Technologies

</td><td>

**Duration:** 1 Weeks

</td></tr>
<tr><td colspan="2">

**Unit Objectives:**

- Students will explore photography, editing, and related ICT careers.

</td></tr>
<tr><td>

**Priority Standards:**

- **TE.ICT.1** – Explore careers in ICT.
- **TE.ICT.1.A** – Analyze the ICT industry.

</td><td>

**Learning Targets (“I Can” Statements):**

- I can identify career paths related to photography and editing.
- I can explain the skills needed for ICT-related roles.

</td></tr>
<tr><td colspan="2">

**Supporting Standards:**

- **TE.ICT.2.D** – (Digital media skills)
- **TE.ICT.2.C** – (Critical thinking and problem solving)

</td></tr>
</table>

## Intro to Engineering

<table>
<tr><td>Unit 1: Exploring Engineering Careers</td><td>Duration: 4 Days</td></tr>
<tr><td colspan="2">Unit Objectives:<br><br>● Students will understand the various fields of engineering, what engineers do in each field, and how engineering affects their everyday lives. They will explore a specific engineering career field and create a presentation for the class.</td></tr>
<tr><td>Priority Standards:<br><br>● TE.ENG.1.A – Explore engineering as a career.<br><br>● TE.ENG.5 – Students will gain knowledge and applications of various engineering disciplines.<br><br>● TE.BB.1.A – Research and identify the education, salary, and job outlook of careers.<br><br>● TE.ENG.2.A – Explain reasons for using an engineering design process.</td><td>Learning Targets (“I Can” Statements):<br><br>● I can identify and describe multiple fields of engineering and what each type of engineer does.<br>● I can explain how engineers solve problems using the engineering design process.<br>● I can research and compare engineering careers based on education, salary, and job outlook.<br>● I can connect different types of engineering to real-world problems and solutions.<br>● I can reflect on my own interests and identify which field of engineering I’d like to explore further.</td></tr>
<tr><td colspan="2">Supporting Standards:<br><br>● TE.BB.2.A – Analyze and use technological systems.<br>● TE.ENG.2.G – Fabricate a prototype or model.</td></tr>
</table>

| | |
|---|---|
| **Unit 2:** Design Process and Technical Sketching | **Duration:** 8 days |

**Unit Objectives:**

- Students will apply the design process to develop solutions and create accurate technical sketches using orthographic projection and proper dimensioning.

| **Priority Standards:** | **Learning Targets ("I Can" Statements):** |
|---|---|
| ● **TE.DP.1.A** – Apply the design process to develop solutions for technical problems.<br>● **TE.DP.2.B** – Utilize orthographic projection techniques to create accurate technical sketches.<br>● **TE.DP.3.C** – Implement geometric relations and dimensions in 2D sketching. | ● I can explain and apply the steps of the design process to solve given problems.<br>● I can create accurate orthographic projection sketches.<br>● I can use dimensions and geometric relations to produce precise 2D sketches. |

**Supporting Standards:**

- **TE.CAD.4.A** – Apply engineering design concepts to develop technical solutions.
- **TE.CAD.5.B** – Interpret and create technical sketches using appropriate industry standards.

| **Unit 3:** Parametric Modeling and Assemblies | **Duration**: 12 days |
|---|---|

**Unit Objectives:**

- Students will develop, modify, and assemble parametric 3D models while applying constraints and analyzing component interactions.

| **Priority Standards:** | **Learning Targets ("I Can" Statements):** |
|---|---|
| ● **TE.CAD.6.A** – Develop and modify parametric models with basic and advanced features.<br>● **TE.CAD.7.B** – Use parametric assembly techniques to combine components. | ● I can create and modify basic parametric models.<br>● I can develop advanced features in parametric modeling.<br>● I can assemble parts using parametric assembly techniques. |

**Supporting Standards:**

- **TE.MFG.3.A** – Apply CAD software to create and manipulate 3D models.
- **TE.MFG.4.B** – Use parametric constraints to ensure accurate component interactions.

| **Unit 4:** Technical Drawings and Precision Measurement | **Duration**: 12 days |
|---|---|
| **Unit Objectives:**<br><br>● Students will produce industry-standard technical drawings and perform precision measurements using specialized tools to ensure accuracy. | |
| **Priority Standards:**<br><br>● **TE.DRW.1.A** - Produce industry-standard technical drawings and working views.<br>● **TE.MES.2.B** - Perform precision measurements using specialized tools. | **Learning Targets ("I Can" Statements):**<br><br>● I can create detailed working drawings using industry standards.<br>● I can use a dial caliper to measure mechanical components accurately to .001". |
| **Supporting Standards:**<br><br>● **TE.DRW.3.A** - Interpret and create technical documentation for manufacturing.<br>● **TE.MES.4.B** - Apply precision measurement techniques to ensure accuracy in production. | |

| **Unit 5:** Prototyping and Team Collaboration | **Duration**: 9 days |
|---|---|
| **Unit Objectives:**<br><br>● Students will safely operate prototyping tools, utilize advanced manufacturing equipment, and collaborate effectively to develop working prototypes. | |

| **Priority Standards:** | **Learning Targets (“I Can” Statements):** |
|---|---|
| ● **TE.PRT.1.A** - Safely operate lab tools to create working prototypes.<br>● **TE.PRT.2.B** - Utilize industrial tools, including laser cutters and CNC machines, to develop final products.<br>● **TE.PRT.3.C** - Demonstrate teamwork and collaboration in project development. | ● I can safely operate lab tools to create functional prototypes.<br>● I can use industrial tools, including laser and CNC machines, to produce final products.<br>● I can effectively collaborate with a team to develop and complete a project. |
| **Supporting Standards:**<br>● **TE.SAF.4.A** - Demonstrate safe usage of prototyping and manufacturing equipment.<br>● **TE.TEAM.5.B** - Apply teamwork and communication skills to complete engineering and design tasks. | |

## Sports Media Production and Video Editing

| **Unit 1:** Introduction to Sports Media & Premiere Pro Basics | **Duration:** 3 weeks |
|---|---|
| **Unit Objectives:**<br>● Explore careers in sports media and ICT industry.<br>● Learn Adobe Premiere Pro interface and workflow.<br>● Understand basic camera operations, lighting, and audio setup for sports shoots. | |
| **Priority Standards:**<br>● **TE.ICT.1.A** – Analyze the information and communication technologies industry.<br>● **TE.ICT.2.B** – Demonstrate knowledge and skills by utilizing graphic design, editing, and creation software. | **Learning Targets (“I Can” Statements):**<br>● Describe sports media ICT careers.<br>● Navigate Premiere Pro and perform basic edits.<br>● Set up camera and lighting for interviews.<br>● Capture quality audio. |

| | |
|---|---|
| • **TE.ICT.2.C** – Analyze and use various technologies related to photographic media. | |
| **Supporting Standards:**<br><br>• **TE.ICT.2.A** – Analyze the communication process, the different forms and purposes of communication, and how communication may change in the future.<br>• **TE.ICT.2.D** – Identify, apply, and analyze the elements and principles of design. | |

| | |
|---|---|
| **Unit 2:** Importing & Organizing Media, Basic Video Editing | **Duration:** 3 weeks |
| **Unit Objectives:**<br><br>• Import and organize media, setup projects in Premiere Pro.<br>• Perform essential edits, cuts, trims, and transitions.<br>• Practice lighting and audio for interviews. | |
| **Priority Standards:**<br><br>• **TE.ICT.2.B** – Demonstrate knowledge and skills by utilizing graphic design, editing, and creation software.<br><br>• **TE.ICT.2.C** – Analyze and use various technologies related to photographic media. | **Learning Targets ("I Can" Statements):**<br><br>• Import and manage sports footage.<br>• Edit and add transitions.<br>• Use three-point lighting.<br>• Record and clean interview audio. |
| **Supporting Standards:**<br><br>• **TE.ICT.1.A** – Analyze the information and communication technologies industry.<br>• **TE.ICT.2.E** – Analyze and use various technologies to produce printed graphic communication products. | |

| **Unit 3:** Creating Sports Highlight Reels | **Duration**: 4 weeks |
|---|---|
| **Unit Objectives:**<br><br>● Assemble dynamic sports highlight reels.<br>● Use keyframe motion, video effects, and color correction. | |
| **Priority Standards:**<br><br>● **TE.ICT.2.B** – Demonstrate knowledge and skills by utilizing graphic design, editing, and creation software.<br><br>● **TE.ICT.2.D** – Identify, apply, and analyze the elements and principles of design. | **Learning Targets ("I Can" Statements):**<br><br>● Create motion-enhanced highlight sequences.<br>● Apply color correction.<br>● Export for social media. |
| **Supporting Standards:**<br><br>● **TE.ICT.2.C** – Analyze and use various technologies related to photographic media.<br>● **TE.ICT.1.A** – Analyze the information and communication technologies industry. | |

| **Unit 4:** Advanced Editing Techniques & Audio Mixing | **Duration**: **Weeks** 3 weeks |
|---|---|
| **Unit Objectives:**<br><br>● Use advanced editing tools and audio mixing.<br>● Add voice-over and music with audio keyframing and transitions. | |
| **Priority Standards:**<br><br>● **TE.ICT.2.B** – Demonstrate knowledge and skills by utilizing graphic design, editing, and creation software.<br><br>● **TE.ICT.2.C** – Analyze and use various technologies related to photographic media. | **Learning Targets ("I Can" Statements):**<br><br>● Perform advanced trims.<br>● Use Essential Sound panel.<br>● Sync voice-over and audio effects<br>. |

**Supporting Standards:**

- **TE.ICT.2.E** – Analyze and use various technologies to produce printed graphic communication products.

| **Unit 5:** Advertising in Sports Media & Promotional Video Creation | ● **Duration:** 3 weeks |
|---|---|

**Unit Objectives:**

- Understand advertising's role in sports media.
- Create compelling sports promos and ads using Premiere Pro.
- Learn branding, target audience, and marketing basics.

| **Priority Standards:** | **Learning Targets:** |
|---|---|
| ● **TE.ICT.1.A** – Analyze the information and communication technologies industry.<br><br>● **TE.ICT.2.B** – Demonstrate knowledge and skills by utilizing graphic design, editing, and creation software.<br><br>● **TE.ICT.2.D** – Identify, apply, and analyze the elements and principles of design. | ● Explain advertising impact on sports media.<br>● Produce 15-30 sec commercials with sponsor branding.<br>● Design animated logos and overlays for ads.<br>● Export videos optimized for marketing. |

**Supporting Standards:**

- **TE.ICT.2.A** – Analyze the communication process, the different forms and purposes of communication, and how communication may change in the future.
- **TE.ICT.2.F** – Analyze and select various technologies to design and develop websites**.**

## Advanced Sports Media Production and Video Editing

| **Unit 1:** Career Exploration & Premiere Pro Interface Deep Dive | **Duration:** 2 weeks |
|---|---|
| **Unit Objectives**<br>● Deepen knowledge of ICT careers in sports entertainment and advertising.<br>● Master Premiere Pro interface, preferences, and shortcuts. | |
| **Priority Standards**<br>● **TE.ICT.1.A** – Analyze the information and communication technologies industry.<br>● **TE.ICT.2.B** – Demonstrate knowledge and skills by utilizing graphic design, editing, and creation | **Learning Targets ("I Can" Statements):**<br>● Research sports media and advertising careers.<br>● Customize Premiere Pro workflow. |
| **Supporting Standards:**<br>● **TE.ICT.2.A** – Analyze the communication process, the different forms and purposes of communication, and how communication may change in the future.<br>● **TE.ICT.2.D** – Identify, apply, and analyze the elements and principles of design. | |

| **Unit 2:** Project Setup & Media Management | **Duration:** 3 weeks |
|---|---|
| **Unit Objectives**<br>● Setup complex projects, sequences, and organize media with metadata.<br>● Handle camera gear and troubleshoot. | |
| **Priority Standards:** | **Learning Targets ("I Can" Statements):** |

| | |
|---|---|
| • **TE.ICT.2.B** – Demonstrate knowledge and skills by utilizing graphic design, editing, and creation software.<br><br>• **TE.ICT.2.C** – Analyze and use various technologies related to photographic media. | • Configure project settings for multi-format sports content.<br>• Organize media professionally.<br>• Setup and troubleshoot camera and audio equipment. |
| **Supporting Standards:**<br><br>• **TE.ICT.2.E** – Analyze and use various technologies to produce printed graphic communication products. | |

| | |
|---|---|
| **Unit 3:** Multi-Camera Editing & Lighting for Sports | **Duration**: 4 weeks |
| **Unit Objective:**<br><br>• Edit multi-camera footage with synced audio.<br>• Use advanced lighting setups for dynamic sports events. | |
| **Priority Standards:**<br><br>• **TE.ICT.2.B** – Demonstrate knowledge and skills by utilizing graphic design, editing, and creation software.<br><br>• **TE.ICT.2.C** – Analyze and use various technologies related to photographic media. | **Learning Targets ("I Can" Statements):**<br><br>• Perform multi-camera edits.<br>• Adjust lighting for indoor/outdoor sports.<br>• Troubleshoot lighting/audio issues. |
| **Supporting Standards:**<br><br>• **TE.ICT.1.A** – Analyze the information and communication technologies industry. | |

| **Unit 4:** Advanced Video Effects, Motion Graphics & Advertising Design | **Duration**: **Weeks** 3 weeks |
|---|---|
| **Unit Objective:**<br><br>● Apply advanced effects, masking, and tracking.<br>● Create complex motion graphics and animated advertising elements.<br>● Use color grading for visual storytelling and branding. | |
| **Priority Standards:**<br><br>● **TE.ICT.2.B** – Demonstrate knowledge and skills by utilizing graphic design, editing, and creation software.<br><br>● **TE.ICT.2.D** – Identify, apply, and analyze the elements and principles of design. | **Learning Targets ("I Can" Statements):**<br><br>● Use masking/tracking for special effects.<br>● Design animated sponsor logos, ad overlays, and promotional graphics.<br>● Perform color grading for mood and brand consistency. |
| **Supporting Standards:**<br><br>● **TE.ICT.2.F** – Analyze and select various technologies to design and develop websites. | |

| **Unit 5:** Audio Mastery & Live Sports Streaming Basics | **Duration:** 3 weeks |
|---|---|
| **Unit Objective:**<br><br>● Master audio mixing, auto-ducking, and voice-over.<br>● Explore live sports streaming equipment and workflows. | |
| **Priority Standards:**<br><br>**TE.ICT.2.C** – Analyze and use various technologies related to photographic media.<br>**TE.ICT.2.B** – Demonstrate knowledge and skills by utilizing graphic design, editing, and creation software. | **Learning Targets:**<br><br>● Mix multiple audio sources professionally.<br>● Set up audio for live streaming.<br>● Integrate commentary, crowd noise, and ads into audio. |

**Supporting Standards:**

**TE.ICT.1.A** – Analyze the information and communication technologies industry.

| **Unit 6:** Capstone: Sports Media Campaign Production with Advertising | **Duration:** 3 weeks |
|---|---|

**Objectives:**

- Produce a comprehensive sports media campaign: interviews, highlights, promos, advertising spots, social media clips.
- Demonstrate mastery of editing, camera, lighting, audio, motion graphics, and advertising strategies.

**Priority Standards:**

- **TE.ICT.1.A** – Analyze the information and communication technologies industry.
- **TE.ICT.2.A** – Analyze the communication process, the different forms and purposes of communication, and how communication may change in the future.
- **TE.ICT.2.B** – Demonstrate knowledge and skills by utilizing graphic design, editing, and creation software.

**Learning Targets:**

- Produce multi-format sports media campaign with sponsor branding and ads.
- Integrate marketing and audience engagement strategies.
- Reflect on project communication and workflow efficiency.

**Supporting Standards:**

- **TE.ICT.2.D** – Identify, apply, and analyze the elements and principles of design.
- **TE.ICT.2.F** – Analyze and select various technologies to design and develop websites.

# Ag Mechanics & Small Engines Curriculum

<table>
<tr><td>Unit 1: Introduction to Small Engines & Agricultural Mechanics</td><td>Duration: 5 Days</td></tr>
<tr><td colspan="2">Unit Objectives:<br><br>● Understand the role and importance of small engines in agriculture and transportation.<br>● Identify different types of internal and external combustion engines.<br>● Learn safety protocols for working with mechanical systems.</td></tr>
<tr><td>Priority Standard:<br><br>● TE.TDL.1.C.a.3: Understand the operating principles of internal and external combustion engines.<br><br>● AFNR.PSMT.1.B.b.1: Investigate significant historical milestones and inventors in the PST industries.</td><td>Learning Targets:<br><br>● I can define small engines and their applications in agriculture.<br>● I can identify safety procedures and best practices in engine mechanics.<br>● I can describe the basic components of combustion engines.<br>● I can explain significant historical milestones and inventors in the outdoor power industries.</td></tr>
<tr><td colspan="2">Supporting Standard:<br><br>● AFNR.PSMT.4.B.b.5: Demonstrate safe practices around power units and equipment.</td></tr>
</table>

<table>
<tr><td>Unit 2: Hand & Power Tools & Equipment Proficiency</td><td>Duration: 6 Days</td></tr>
<tr><td colspan="2">Unit Objectives:<br><br>● Correctly identify hand and power tools by correct name.<br>● Understand the function of various hand and power tools in small engine servicing.<br>● Develop proficiency in using specialty tools and equipment.</td></tr>
<tr><td>Priority Standard:</td><td>Learning Targets:</td></tr>
</table>

| | |
|---|---|
| • **AFNR.PSMT.2.E.b.1:** Identify and describe the use of hand and power tools and equipment. | • I can identify common tools used in small engine mechanics.<br>• I can safely use hand and power tools.<br>• I can demonstrate proper tool handling and storage procedures. |
| **Supporting Standard:**<br>• **AFNR.PSMT.4.E.i.1:** Demonstrate safe operation of tractors, machinery, and implements. | |

| | |
|---|---|
| **Unit 3:** Precision Measurement & Applied Engine Math | **Duration**: 6 Days |
| **Unit Objectives:**<br>• Develop proficiency in using specialty tools and equipment such as micrometers and dial calipers.<br>• Able to use and apply math formulas to convert between celsius and fahrenheit, calculate work, power, horse power. | |
| **Priority Standard:**<br>• **TE.TDL.1.C.a.9:** Demonstrate safe and proficient use of specialty tools and equipment related to servicing outdoor power equipment and their systems. | **Learning Targets:**<br>• I can use precision instruments such as micrometers and dial calipers accurately to check engine tolerances.<br>• I can use basic math skills and formulas to convert between celsius and fahrenheit, and to calculate work, power, horse power. |
| **Supporting Standards:**<br>• **AFNR.PSMT.2.B.a.1:** Utilize a variety of measuring tools used in AFNR power, structural, and mechanical technology applications. | |

| **Unit 4:** Engine Principles and Operation | **Duration**: 6 Days |
|---|---|
| **Unit Objectives:**<br><br>● Understand the fundamental principles of internal and external combustion engines.<br>● Learn the operating cycles of two-stroke and four-stroke engines. | |
| **Priority Standard:**<br><br>● **TE.TDL.1.C.a.3:** Understand the operating principles of internal and external combustion engines. | **Learning Targets:**<br><br>● I can explain the combustion process in internal and external combustion engines.<br>● I can compare and contrast two-stroke and four-stroke engines.<br>● I can identify and describe engine components and their functions. |
| **Supporting Standards:**<br><br>● **AFNR.PSMT.4.B.i.4:** Identify power unit and equipment controls and instruments, along with their functions. | |

| **Unit 5:** Engine Operation and Adjustment | **Duration**: 10 Days |
|---|---|
| **Unit Objectives:**<br><br>● Learn how to safely assemble, and adjust engines and related implements.<br>● Understand the impact of improper adjustments on performance. | |
| **Priority Standards:**<br><br>● **AFNR.PSMT.3.A.i.1.a:** Observe safety precautions when working around engines and motors.<br>● **AFNR.PSMT.4.A.a.1:** Safely attach and adjust engines and implements for safe and efficient operation. | **Learning Targets:**<br><br>● I can disassemble and reassemble a working small engine using an industry recognized teardown and reassembly script.<br>● I can adjust engines for safe and efficient operation. |

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| | ● I can follow safety guidelines when handling engine components. |
| **Supporting Standards:**<br><br>● **AFNR.PSMT.4.A.i.1:** Locate safety warnings, dangers, and caution areas on equipment and in the operation manuals. | |

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| **Unit 6:** Troubleshooting & Repair of Mechanical Systems | **Duration**: 7 Days |
| **Unit Objectives:**<br><br>● Develop troubleshooting skills for belts, drives, chains, and sprockets.<br>● Use diagnostic tools and software to identify engine issues. | |
| **Priority Standards:**<br><br>● **AFNR.PSMT.3.B.a.3:** Analyze, troubleshoot, and performance test outdoor power equipment to determine service and repair needs. | **Learning Targets:**<br><br>● I can perform repairs following industry best practices.<br>● I can diagnose performance issues in engine, hydraulic, belt and chain-driven systems.<br>● I can use diagnostic tools and troubleshooting steps to analyze mechanical problems. |
| **Supporting Standards:**<br><br>● **AFNR.PSMT.4.B.a.2:** Adjust and troubleshoot equipment, including belts and drives, chains and sprockets, and maintain fluid conveyance components, such as hoses, lines, and nozzles, using computer and on-board diagnostics.<br>● **AFNR.PSMT.4.B.i.2:** Service filtration systems and maintain fluid levels on power units and equipment. | |

| **Unit 7:** Engine Maintenance & Service | **Duration**: 3 Days |
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| **Unit Objectives:**<br><br>● Perform routine maintenance to extend engine life.<br>● Understand the importance of following manufacturer guidelines. | |
| **Priority Standards:**<br><br>● **TE.TDL.1.C.a.11:** Perform general engine maintenance, diagnosis, service, and repair related directly to current national standards.<br><br>● **TE.TDL.1.C.a.12:** Perform and document maintenance procedures in accordance with the recommendations of the manufacturer. | **Learning Targets:**<br><br>● I can conduct oil changes, air filter replacements, and general inspections.<br>● I can follow a maintenance schedule based on manufacturer recommendations.<br>● I can record and document service procedures accurately. |
| **Supporting Standards:**<br><br>● **AFNR.PSMT.4.B.i.3:** Develop a preventive maintenance schedule for power units and equipment. | |

| **Unit 8:** Career Readiness & Industry Applications | **Duration**: 3 Days |
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| **Unit Objectives:**<br><br>● Explore career opportunities in small engine repair and agricultural mechanics.<br>● Develop workplace readiness skills. | |
| **Priority Standards:**<br><br>● **AFNR.PSMT.1.F.b.1:** Identify careers related to power, structure, and mechanical technology systems.<br><br>● **AFNR.PSMT.1.F:** Explore career | **Learning Targets:**<br><br>● I can identify career pathways in engine repair and related fields.<br>● I can develop soft skills such as teamwork and communication.<br>● I can understand the importance of |

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| fields and opportunities of power, structure, and mechanical technology systems industry. | industry certifications and training opportunities. |
| **Supporting Standards:**<br>● **AFNR.PSMT.8.A.b.1:** Identify and summarize steps to pursue a career in an AFNR pathway. | |

## Auto Service I

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| **Unit:** Introduction to Auto Service | **Duration:** 5 days |
| **Unit Objectives (overarching objectives):**<br>● Identify major automotive career paths and ASE certification levels.<br>● Describe the roles and responsibilities of an entry-level automotive technician.<br>● Demonstrate proper use and storage of common shop tools and equipment.<br>● Interpret a basic repair order and explain the service workflow. | |
| **Priority Standards:**<br>● **TE.TDL.1.B**: Analyze and explain what transportation vehicles are and how transportation vehicle systems work. | **Learning Targets:**<br>● I can explain the types of jobs and career paths in the automotive industry.<br>● I can describe the steps a vehicle follows through a repair shop.<br>● I can identify and correctly name the most common hand tools and shop equipment.<br>● I can follow class procedures for attendance, clean-up, and tool checkout. |
| **Supporting Standards:**<br>● **TE.TDL.1.B.i.1:** Predict how a lack of maintenance can lead to degradation and | |

premature failure.
- **TE.TDL.1.C.b.3:** Identify examples of safety related to the use of simple tools and equipment.
- **TE.TDL.1.C.i.6:** Successfully put into practice SkillsUSA activities, such as leadership and career exploration.

| **Unit:** Auto Service Safety | **Duration:** 7 days |
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| **Unit Objectives (overarching objectives):**<br><br>● Demonstrate correct use of personal protective equipment (PPE).<br>● Apply OSHA and school-shop safety procedures, including lift operation and jack-stand placement.<br>● Locate and interpret Safety Data Sheets (SDS) for automotive chemicals.<br>● Respond appropriately to shop emergencies such as fire, chemical spills, or electrical hazards. | |
| **Priority Standards:**<br><br>● **TE.TDL.1.B:** Analyze and explain what transportation vehicles are and how transportation vehicle systems work. | **Learning Targets:**<br><br>● I can choose and wear the correct personal protective equipment (PPE) for each task.<br>● I can show how to lift a vehicle safely using a hoist or jack stands.<br>● I can use the SP2 safety training.<br>● I can describe what to do in a shop emergency such as a fire, spill, or electrical shock. |
| **Supporting Standards:**<br><br>● **TE.TDL.1.B.i.1:** Predict how a lack of maintenance can lead to degradation and premature failure.<br>● **TE.TDL.1.B.a.3:** Identify vehicle structural parts and cosmetic parts.<br>● **TE.TDL.1.C.b.3:** Identify examples of safety related to the use of simple tools and equipment.<br>● **TE.TDL.1.C.a.2:** Understand the basic principles of electrical, pneumatic, and hydraulic power and their applications.<br>● **TE.TDL.1.C.a.9:** Demonstrate safe and proficient use of specialty tools and equipment related to servicing transportation vehicles and their systems. | |

| **Unit:** Preventative Maintenance | **Duration:** 12 days |
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| **Unit Objectives (overarching objectives):**<br><br>● Perform a multi-point vehicle inspection, identifying wear or fluid issues.<br>● Check and replace engine oil, coolant, windshield washer fluid, and other service fluids to manufacturer specifications.<br>● Rotate and torque wheels to specification.<br>● Create and maintain accurate service records. | |
| **Priority Standards:**<br><br>● **TE.TDL.1.B:** Analyze and explain what transportation vehicles are and how transportation vehicle systems work.<br><br>● **TE.TDL.1.C:** Develop the skill set necessary to diagnose, problem-solve, and repair transportation vehicles | **Learning Targets:**<br><br>● I can check fluid levels and explain when each should be changed.<br>● I can perform an oil change and record it on a service ticket.<br>● I can inspect belts, hoses, wipers, and tires for wear.<br>● I can rotate and torque wheels to the manufacturer's specification.<br>● I can use Shopkeypro to recommend proper maintenance intervals |
| **Supporting Standards:**<br><br>● **TE.TDL.1.B.i.1:** Predict how a lack of maintenance can lead to degradation and premature failure.<br>● **TE.TDL.1.B.a.1:** Interpret preventive maintenance schedules and recommended service intervals for vehicles and systems.<br>● **TE.TDL.1.B.a.3:** Identify vehicle structural parts and cosmetic parts.<br>● **TE.TDL.1.B.i.3:** Explain that a transportation system may lose efficiency or fail if one part is missing or malfunctioning or if a subsystem is not working properly.<br>● **TE.TDL.1.C.a.2:** Understand the basic principles of electrical, pneumatic, and hydraulic power and their applications.<br>● **TE.TDL.1.C.a.6:** Understand the function and principles of automotive drivetrain, steering and suspension, brake, and tire and wheel components and systems in accordance with current national standards for various areas, such as Automotive Service Excellence (ASE) certification, Federal Motor Vehicle Safety Standards (FMVSS) issued by the National Highway Traffic Safety Administration (NHTSA). | |

| **Unit:** Tire and Wheel | **Duration:** 10 days |
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| **Unit Objectives (overarching objectives):**<br><br>● Identify tire sizes, load ratings, and speed ratings using sidewall markings.<br>● Inspect tires for tread depth, damage, and abnormal wear patterns.<br>● Safely mount, dismount, and balance tires using shop equipment.<br>● Torque wheels to manufacturer specifications and verify with a torque wrench. | |
| **Priority Standards:**<br><br>● **TE.TDL.1.B:** Analyze and explain what transportation vehicles are and how transportation vehicle systems work.<br><br>● **TE.TDL.1.C:** Develop the skill set necessary to diagnose, problem-solve, and repair transportation vehicles. | **Learning Targets:**<br><br>● I can read a tire's size, load rating, and speed rating from the sidewall.<br>● I can measure tread depth and identify uneven wear patterns.<br>● I can safely mount, dismount, and balance a tire using shop equipment.<br>● I can tighten lug nuts with a torque wrench to the correct specification.<br>● I can patch and repair a tire<br>● I can relearn TPMS sensors |
| **Supporting Standards:**<br><br>● **TE.TDL.1.B.a.5:** Explain that all systems demand specific repair procedures in order to achieve the highest performance and efficiency in automotive, collision, or diesel areas.<br>● **TE.TDL.1.B.i.3:** Explain that a transportation system may lose efficiency or fail if one part is missing or malfunctioning or if a subsystem is not working properly.<br>● **TE.TDL.1.C.a.2:** Understand the basic principles of electrical, pneumatic, and hydraulic power and their applications.<br>● **TE.TDL.1.C.a.6:** Understand the function and principles of automotive drivetrain, steering and suspension, brake, and tire and wheel components and systems in accordance with current national standards for various areas, such as Automotive Service Excellence (ASE) certification, Federal Motor Vehicle Safety Standards (FMVSS) issued by the National Highway Traffic Safety Administration (NHTSA).<br>● **TE.TDL.1.C.a.9:** Demonstrate safe and proficient use of specialty tools and equipment related to servicing transportation vehicles and their systems. | |

| **Unit:** Brake and ABS | **Duration:** 8 days |
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**Unit Objectives (overarching objectives):**

- Explain the principles of hydraulic braking and the function of ABS.
- Inspect brake pads, rotors, drums, and hydraulic lines for wear or damage.
- Measure rotor thickness and drum diameter against service limits.
- Replace brake pads and bleed the brake system according to procedure.
- Diagnose common ABS warning light conditions using a scan tool.

| **Priority Standards:** | **Learning Targets:** |
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| ● **TE.TDL.1.B:** Analyze and explain what transportation vehicles are and how transportation vehicle systems work.<br><br>● **TE.TDL.1.C:** Develop the skill set necessary to diagnose, problem-solve, and repair transportation vehicles. | ● I can describe how hydraulic brakes work and what ABS adds to the system.<br>● I can inspect pads, rotors, and brake lines for wear or leaks.<br>● I can measure rotor thickness and compare it to service limits.<br>● I can replace brake pads and bleed the brake system correctly.<br>● I can use a scan tool to check for and clear ABS fault codes.<br>● I can interpret data from WSS |

**Supporting Standards:**

- **TE.TDL.1.B.a.5:** Explain that all systems demand specific repair procedures in order to achieve the highest performance and efficiency in automotive, collision, or diesel areas.
- **TE.TDL.1.B.i.3:** Explain that a transportation system may lose efficiency or fail if one part is missing or malfunctioning or if a subsystem is not working properly.
- **TE.TDL.1.B.b.3:** Explain that malfunctioning components must be repaired or replaced to restore intended operation.
- **TE.TDL.1.C.a.2:** Understand the basic principles of electrical, pneumatic, and hydraulic power and their applications.
- **TE.TDL.1.C.a.6:** Understand the function and principles of automotive drivetrain, steering and suspension, brake, and tire and wheel components and systems in accordance with current national standards for various areas, such as Automotive Service Excellence (ASE) certification, Federal Motor Vehicle Safety Standards (FMVSS) issued by the National Highway Traffic Safety Administration (NHTSA).
- **TE.TDL.1.C.a.9:** Demonstrate safe and proficient use of specialty tools and equipment related to servicing transportation vehicles and their systems.

| **Unit:** Electrical Systems | **Duration:** 22 days |
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| **Unit Objectives (overarching objectives):**<br><br>● Describe the flow of electricity in series and parallel circuits.<br>● Safely use a digital multimeter to measure voltage, resistance, and current.<br>● Test and service automotive batteries, starters, and alternators.<br>● Interpret wiring diagrams to trace and repair simple circuit faults. | |
| **Priority Standards:**<br><br>● **TE.TDL.1.B:** Analyze and explain what transportation vehicles are and how transportation vehicle systems work.<br><br>● **TE.TDL.1.C:** Develop the skill set necessary to diagnose, problem-solve, and repair transportation vehicles. | **Learning Targets:**<br><br>● I can explain the difference between series and parallel circuits.<br>● I can safely use a digital multimeter to test voltage, resistance, and current.<br>● I can test a battery's state of charge and perform a load test.<br>● I can check starter and alternator operation and identify common faults.<br>● I can read a simple wiring diagram to trace a circuit. |
| **Supporting Standards:**<br><br>● **TE.TDL.1.B.a.5:** Explain that all systems demand specific repair procedures in order to achieve the highest performance and efficiency in automotive, collision, or diesel areas.<br>● **TE.TDL.1.C.a.2:** Understand the basic principles of electrical, pneumatic, and hydraulic power and their applications.<br>● **TE.TDL.1.C.a.5:** Understand how to maintain, diagnose, and repair vehicle electrical systems, both high-voltage and low-voltage.<br>● **TE.TDL.1.C.a.9:** Demonstrate safe and proficient use of specialty tools and equipment related to servicing transportation vehicles and their systems. | |

| **Unit:** Cooling Systems | **Duration:** 7 days |
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| **Unit Objectives (overarching objectives):** | |

- Identify the components and flow path of a liquid-cooled automotive engine.
- Test coolant concentration and pressure-test the system for leaks.
- Inspect hoses, belts, and the radiator for wear or damage.
- Perform a coolant flush and refill to proper specifications.

| **Priority Standards:** | **Learning Targets:** |
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| ● **TE.TDL.1.B:** Analyze and explain what transportation vehicles are and how transportation vehicle systems work.<br>● **TE.TDL.1.C:** Develop the skill set necessary to diagnose, problem-solve, and repair transportation vehicles. | ● I can identify all major parts of a liquid-cooled engine system.<br>● I can check coolant strength and pressure-test the system for leaks.<br>● I can inspect hoses, belts, and the radiator for wear or damage.<br>● I can flush and refill the cooling system to the correct level and mix. |

**Supporting Standards:**

- **TE.TDL.1.B.a.5:** Explain that all systems demand specific repair procedures in order to achieve the highest performance and efficiency in automotive, collision, or diesel areas.
- **TE.TDL.1.B.i.3:** Explain that a transportation system may lose efficiency or fail if one part is missing or malfunctioning or if a subsystem is not working properly.
- **TE.TDL.1.B.b.3:** Explain that malfunctioning components must be repaired or replaced to restore intended operation.
- **TE.TDL.1.C.a.2:** Understand the basic principles of electrical, pneumatic, and hydraulic power and their applications.
- **TE.TDL.1.C.a.3:** Understand the operating principles of internal and external combustion engines.
- **TE.TDL.1.C.a.9:** Demonstrate safe and proficient use of specialty tools and equipment related to servicing transportation vehicles and their systems.

| **Unit:** Fuel Systems | **Duration:** 6 days |
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**Unit Objectives (overarching objectives):**

- Describe the operation of fuel pumps, injectors, filters, and pressure regulators.
- Safely relieve fuel-system pressure and replace fuel filters.

- Measure and interpret fuel pressure readings to diagnose common issues.
- Explain basic fuel-injection control and its relationship to emissions.

| **Priority Standards:** | **Learning Targets:** |
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| ● **TE.TDL.1.B:** Analyze and explain what transportation vehicles are and how transportation vehicle systems work.<br>● **TE.TDL.1.C:** Develop the skill set necessary to diagnose, problem-solve, and repair transportation vehicles. | ● I can describe how fuel travels from the tank to the injectors.<br>● I can relieve fuel-system pressure safely before service.<br>● I can replace a fuel filter following proper procedures.<br>● I can measure fuel pressure and compare it to manufacturer specifications. |

**Supporting Standards:**

- **TE.TDL.1.B.a.5:** Explain that all systems demand specific repair procedures in order to achieve the highest performance and efficiency in automotive, collision, or diesel areas.
- **TE.TDL.1.B.b.3:** Explain that malfunctioning components must be repaired or replaced to restore intended operation.
- **TE.TDL.1.C.a.2:** Understand the basic principles of electrical, pneumatic, and hydraulic power and their applications.
- **TE.TDL.1.C.a.3:** Understand the operating principles of internal and external combustion engines.
- **TE.TDL.1.C.a.9:** Demonstrate safe and proficient use of specialty tools and equipment related to servicing transportation vehicles and their systems.

| **Unit:** ASE Certification | **Duration:** 8 days |
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**Unit Objectives (overarching objectives):**

- Identify the ASE certification categories and Entry-Level/MLR requirements.
- Demonstrate familiarity with the format of ASE practice tests.
- Develop a personal plan for pursuing ASE certification and related career goals.

| **Priority Standards:** | **Learning Targets:** |
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| • **TE.TDL.1.A:** Show an awareness of transportation vehicles and the role they play in society. | • I can name the different ASE certification areas and their requirements.<br>• I can answer sample ASE entry-level test questions.<br>• I can create a personal plan for earning ASE certifications after high school.<br>• I can attain ASE student certification if chosen. |
| **Supporting Standards:**<br>• **TE.TDL.1.A.a.4:** Obtain certifications related to transportation systems, such as ASE and CDL, or complete a Youth Apprenticeship in a related transportation field, such as automotive, collision, or diesel.<br>• **TE.TDL.1.B.a.1:** Interpret preventive maintenance schedules and recommended service intervals for vehicles and systems.<br>• **TE.TDL.1.C.a.6:** Understand the function and principles of automotive drivetrain, steering and suspension, brake, and tire and wheel components and systems in accordance with current national standards for various areas, such as Automotive Service Excellence (ASE) certification, Federal Motor Vehicle Safety Standards (FMVSS) issued by the National Highway Traffic Safety Administration (NHTSA).<br>• **TE.TDL.1.C.a.14:** Earn an ASE Entry-Level Certification in motor vehicle/diesel repair or collision repair/finishing. Or complete a Youth Apprenticeship in a related repair career area. | |

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| **Unit:** Hybrid and Electric Vehicle Basics | **Duration:** 5 days |
| **Unit Objectives (overarching objectives):**<br>• Identify key components of hybrid and electric drivetrains (battery pack, inverter, motor).<br>• Explain high-voltage safety procedures and required PPE.<br>• Describe regenerative braking and its effect on energy recovery.<br>• Compare routine maintenance differences between conventional and hybrid/EV vehicles. | |
| **Priority Standards:** | **Learning Targets:** |

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| • **TE.TDL.1.B:** Analyze and explain what transportation vehicles are and how transportation vehicle systems work. | • I can point out the main components of a hybrid or electric vehicle.<br>• I can describe high-voltage safety procedures and demonstrate proper PPE.<br>• I can explain how regenerative braking stores energy.<br>• I can compare the routine maintenance needs of hybrids, EVs, and conventional cars. |
| **Supporting Standards:**<br>• **TE.TDL.1.A.a.2:** Identify how government regulations and technological trade-offs might influence the transportation modes used to move people and goods from one place to another.<br>• **TE.TDL.1.C.b.1:** Give examples of core content areas, including science, technology, engineering, and math, that are directly applicable to the transportation field.<br>• TE.TDL.1.C.a.1: Understand the applications of alternative power sources.<br>• **TE.TDL.1.C.a.5:** Understand how to maintain, diagnose, and repair vehicle electrical systems, both high-voltage and low-voltage. | |

## Auto Service II

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| **Unit:** Safety and Shop Environment | **Duration:** 3 days |
| **Unit Objectives (overarching objectives):**<br>• Identify and apply OSHA and school shop safety rules, including proper PPE and lockout/tagout procedures.<br>• Demonstrate safe use of hand tools, power tools, and vehicle lifts.<br>• Perform a complete safety inspection of the shop and create a hazard-mitigation report.<br>• Describe proper handling, storage, and disposal of automotive chemicals and waste.<br>• Create website related to the transportation industry | |
| **Priority Standards:** | **Learning Targets:** |

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| • **TE.TDL.1.B:** Analyze and explain what transportation vehicles are and how transportation vehicle systems work. | • I can identify and use the correct personal protective equipment (PPE) for any shop task.<br>• I can demonstrate safe operation of lifts, jacks, and power tools.<br>• I can locate and use emergency equipment such as fire extinguishers, eyewash stations, and spill kits.<br>• I can explain how to store and dispose of automotive chemicals and waste safely. |
| **Supporting Standards:**<br><br>• **TE.TDL.1.B.i.1:** Predict how a lack of maintenance can lead to degradation and premature failure.<br>• **TE.TDL.1.B.a.3:** Identify vehicle structural parts and cosmetic parts.<br>• **TE.TDL.1.C.b.3:** Identify examples of safety related to the use of simple tools and equipment.<br>• **TE.TDL.1.C.b.3:** Identify examples of safety related to the use of simple tools and equipment.<br>• **TE.TDL.1.C.i.6:** Successfully put into practice SkillsUSA activities, such as leadership and career exploration.<br>• **TE.TDL.1.C.a.2:** Understand the basic principles of electrical, pneumatic, and hydraulic power and their applications. | |

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| **Unit:** Vehicle Disassembly | **Duration:** 12 days |
| **Unit Objectives (overarching objectives):**<br><br>• Interpret factory service manuals and torque specifications for removal and installation of components.<br>• Safely disassemble major vehicle systems (e.g., engine accessories, suspension assemblies) without damaging parts.<br>• Label, organize, and document hardware and components for efficient reassembly. | |
| **Priority Standards:**<br><br>• **TE.TDL.1.B:** Analyze and explain what transportation vehicles are and | **Learning Targets:**<br><br>• I can read and follow a factory service manual to remove components |

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| how transportation vehicle systems work.<br><br>● **TE.TDL.1.C:** Develop the skill set necessary to diagnose, problem-solve, and repair transportation vehicles | correctly.<br>● I can disassemble a major vehicle system while preventing damage to parts.<br>● I can label and organize hardware so reassembly is efficient and accurate.<br>● I can document each disassembly step with notes or photos. |
| **Supporting Standards:**<br><br>● **TE.TDL.1.B.i.1:** Predict how a lack of maintenance can lead to degradation and premature failure.<br>● **TE.TDL.1.B.a.3:** Identify vehicle structural parts and cosmetic parts.<br>● **TE.TDL.1.C.a.9:** Demonstrate safe and proficient use of specialty tools and equipment related to servicing transportation vehicles and their systems. | |

| **Unit:** Preventative Maintenance | **Duration:** 8 days |
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| **Unit Objectives (overarching objectives):**<br><br>● Explain manufacturer-recommended service intervals and their impact on vehicle reliability.<br>● Perform advanced fluid checks (oil analysis, brake fluid moisture test, coolant condition).<br>● Inspect, rotate, and balance tires; measure tread depth and set proper inflation.<br>● Create a digital or written maintenance schedule for a customer vehicle. | |
| **Priority Standards:**<br><br>● **TE.TDL.1.B:** Analyze and explain what transportation vehicles are and how transportation vehicle systems work.<br><br>● **TE.TDL.1.C:** Develop the skill set necessary to diagnose, problem-solve, and repair transportation vehicles. | **Learning Targets:**<br><br>● I can check and record the condition of all major vehicle fluids.<br>● I can perform tire rotations, balancing, and inflation adjustments.<br>● I can create a maintenance schedule based on manufacturer recommendations.<br>● I can explain why regular service prevents costly repairs. |

**Supporting Standards:**

- **TE.TDL.1.B.i.1:** Predict how a lack of maintenance can lead to degradation and premature failure.
- **TE.TDL.1.B.a.1:** Interpret preventive maintenance schedules and recommended service intervals for vehicles and systems.
- **TE.TDL.1.B.a.3:** Identify vehicle structural parts and cosmetic parts.
- **TE.TDL.1.B.i.3:** Explain that a transportation system may lose efficiency or fail if one part is missing or malfunctioning or if a subsystem is not working properly.
- **TE.TDL.1.C.a.2:** Understand the basic principles of electrical, pneumatic, and hydraulic power and their applications.

| **Unit:** Driveability | **Duration:** 8 days |
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| **Unit Objectives (overarching objectives):**<br>● Diagnose drivability concerns (hard start, misfire, poor idle) using scan tools and live-data streams.<br>● Test and evaluate fuel delivery, ignition, and emissions systems.<br>● Interpret trouble codes and recommend appropriate repairs.<br>● Verify repairs through road testing and data comparison. | |
| **Priority Standards:**<br>● **TE.TDL.1.B:** Analyze and explain what transportation vehicles are and how transportation vehicle systems work. | **Learning Targets:**<br>● I can connect and operate a scan tool to retrieve and clear diagnostic trouble codes.<br>● I can use live-data streams to pinpoint a drivability problem such as a misfire or rough idle.<br>● I can perform basic fuel and ignition system tests.<br>● I can confirm that a repair solved the drivability concern.<br>● I can properly communicate with customers. |
| **Supporting Standards:**<br>● **TE.TDL.1.B.a.5:** Explain that all systems demand specific repair procedures in order | |

to achieve the highest performance and efficiency in automotive, collision, or diesel areas.
- **TE.TDL.1.C.a.2:** Understand the basic principles of electrical, pneumatic, and hydraulic power and their applications.
- **TE.TDL.1.C.a.9:** Demonstrate safe and proficient use of specialty tools and equipment related to servicing transportation vehicles and their systems.

| **Unit:** Engine Mechanical | **Duration:** 6 days |
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| **Unit Objectives (overarching objectives):**<br><br>● Perform compression, vacuum, and leak-down tests to evaluate engine condition.<br>● Inspect and service timing components, gaskets, and seals.<br>● Disassemble and reassemble key engine subsystems following manufacturer specs.<br>● Analyze wear patterns to determine probable causes of engine damage. | |
| **Priority Standards:**<br><br>● **TE.TDL.1.B:** Analyze and explain what transportation vehicles are and how transportation vehicle systems work.<br><br>● **TE.TDL.1.C:** Develop the skill set necessary to diagnose, problem-solve, and repair transportation vehicles. | **Learning Targets:**<br><br>● I can perform compression and leak-down tests to judge engine health.<br>● I can remove and replace timing belts or chains following correct torque specs.<br>● I can identify wear patterns on engine components and explain possible causes.<br>● I can reassemble engine parts to factory specifications. |
| **Supporting Standards:**<br><br>● **TE.TDL.1.B.i.1:** Predict how a lack of maintenance can lead to degradation and premature failure.<br>● **TE.TDL.1.B.a.5:** Explain that all systems demand specific repair procedures in order to achieve the highest performance and efficiency in automotive, collision, or diesel areas.<br>● **TE.TDL.1.B.b.3:** Explain that malfunctioning components must be repaired or replaced to restore intended operation.<br>● **TE.TDL.1.C.a.2:** Understand the basic principles of electrical, pneumatic, and | |

hydraulic power and their applications.
- **TE.TDL.1.C.a.3:** Understand the operating principles of internal and external combustion engines.
- **TE.TDL.1.C.a.9:** Demonstrate safe and proficient use of specialty tools and equipment related to servicing transportation vehicles and their systems.

| **Unit:** Metal fabrication | **Duration:** 8 days |
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| **Unit Objectives (overarching objectives):**<br><br>● Safely set up and operate MIG or TIG welding equipment and plasma cutters.<br>● Measure, cut, and bend metal to create custom brackets or panels.<br>● Apply finishing techniques such as grinding, deburring, and corrosion protection.<br>● Design and fabricate a small part that meets specific dimensional requirements. | |
| **Priority Standards:**<br><br>● **TE.TDL.1.B:** Analyze and explain what transportation vehicles are and how transportation vehicle systems work.<br><br>● **TE.TDL.1.C:** Develop the skill set necessary to diagnose, problem-solve, and repair transportation vehicles. | **Learning Targets:**<br><br>● I can set up and safely operate MIG or TIG welding equipment.<br>● I can measure, cut, and shape metal accurately for a specific project.<br>● I can weld and finish a small part so it is strong and visually clean.<br>● I can protect fabricated parts from corrosion.<br>● I can cut and make threads. |
| **Supporting Standards:**<br><br>● **TE.TDL.1.C.a.2:** Understand the basic principles of electrical, pneumatic, and hydraulic power and their applications.<br>● **TE.TDL.1.C.a.9:** Demonstrate safe and proficient use of specialty tools and equipment related to servicing transportation vehicles and their systems. | |

| **Unit:** Suspension Systems | **Duration:** 9 days |
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**Unit Objectives (overarching objectives):**

- Explain the function of springs, shocks/struts, bushings, and control arms.
- Measure ride height and identify worn or damaged components.
- Perform a four-wheel alignment and adjust camber, caster, and toe to specifications.
- Diagnose noises or handling issues related to suspension wear.

**Priority Standards:**

- **TE.TDL.1.B:** Analyze and explain what transportation vehicles are and how transportation vehicle systems work.
- **TE.TDL.1.C:** Develop the skill set necessary to diagnose, problem-solve, and repair transportation vehicles.

**Learning Targets:**

- I can describe how springs, shocks, and struts support ride and handling.
- I can inspect and replace worn suspension components.
- I can perform and interpret a four-wheel alignment.
- I can diagnose noises or handling issues related to suspension wear.

**Supporting Standards:**

- **TE.TDL.1.B.a.5:** Explain that all systems demand specific repair procedures in order to achieve the highest performance and efficiency in automotive, collision, or diesel areas.
- **TE.TDL.1.B.i.3:** Explain that a transportation system may lose efficiency or fail if one part is missing or malfunctioning or if a subsystem is not working properly.
- **TE.TDL.1.B.b.3:** Explain that malfunctioning components must be repaired or replaced to restore intended operation.
- **TE.TDL.1.C.a.2:** Understand the basic principles of electrical, pneumatic, and hydraulic power and their applications.
- **TE.TDL.1.C.a.6:** Understand the function and principles of automotive drivetrain, steering and suspension, brake, and tire and wheel components and systems in accordance with current national standards for various areas, such as Automotive Service Excellence (ASE) certification, Federal Motor Vehicle Safety Standards (FMVSS) issued by the National Highway Traffic Safety Administration (NHTSA).
- **TE.TDL.1.C.a.9:** Demonstrate safe and proficient use of specialty tools and equipment related to servicing transportation vehicles and their systems.

| **Unit:** Steering Systems | **Duration:** 7 days |
|---|---|

**Unit Objectives (overarching objectives):**

- Compare hydraulic and electric power steering systems and their components.
- Diagnose and repair common steering problems such as play, vibration, or fluid leaks.
- Perform steering system pressure tests and adjustments.
- Align the steering wheel and verify correct center after service.

**Priority Standards:**

- **TE.TDL.1.B:** Analyze and explain what transportation vehicles are and how transportation vehicle systems work.
- **TE.TDL.1.C:** Develop the skill set necessary to diagnose, problem-solve, and repair transportation vehicles

**Learning Targets:**

- I can compare hydraulic and electric power steering systems.
- I can check for steering play and fluid leaks.
- I can perform a steering system pressure test and interpret the results.
- I can align the steering wheel to center after service.

**Supporting Standards:**

- **TE.TDL.1.B.a.5:** Explain that all systems demand specific repair procedures in order to achieve the highest performance and efficiency in automotive, collision, or diesel areas.
- **TE.TDL.1.B.b.3:** Explain that malfunctioning components must be repaired or replaced to restore intended operation.
- **TE.TDL.1.C.a.2:** Understand the basic principles of electrical, pneumatic, and hydraulic power and their applications.
- **TE.TDL.1.C.a.6:** Understand the function and principles of automotive drivetrain, steering and suspension, brake, and tire and wheel components and systems in accordance with current national standards for various areas, such as Automotive Service Excellence (ASE) certification, Federal Motor Vehicle Safety Standards (FMVSS) issued by the National Highway Traffic Safety Administration (NHTSA).

**Unit:** Transmissions | **Duration:** 8 days

**Unit Objectives (overarching objectives):**

- Differentiate between automatic, manual, CVT, and hybrid drive systems.
- Service and replace transmission fluid and filters to manufacturer standards.

- Perform basic teardown and inspection of a manual transmission or transaxle.
- Identify symptoms of transmission failure and recommend next steps.

| **Priority Standards:** | **Learning Targets:** |
|---|---|
| ● **TE.TDL.1.B:** Analyze and explain what transportation vehicles are and how transportation vehicle systems work.<br>● **TE.TDL.1.C:** Develop the skill set necessary to diagnose, problem-solve, and repair transportation vehicles. | ● I can explain the differences between automatic, manual, CVT, and hybrid drive systems.<br>● I can change transmission fluid and filters following service specifications.<br>● I can disassemble and inspect a manual transmission for wear or damage. |

**Supporting Standards:**

- **TE.TDL.1.B.a.5:** Explain that all systems demand specific repair procedures in order to achieve the highest performance and efficiency in automotive, collision, or diesel areas.
- **TE.TDL.1.B.i.3:** Explain that a transportation system may lose efficiency or fail if one part is missing or malfunctioning or if a subsystem is not working properly.
- **TE.TDL.1.B.b.3:** Explain that malfunctioning components must be repaired or replaced to restore intended operation.
- **TE.TDL.1.C.a.2**: Understand the basic principles of electrical, pneumatic, and hydraulic power and their applications.
- **TE.TDL.1.C.a.9:** Demonstrate safe and proficient use of specialty tools and equipment related to servicing transportation vehicles and their systems.

| **Unit:** Alternative Energy Fuels | **Duration:** 6 days |
|---|---|

**Unit Objectives (overarching objectives):**

- Describe the operation of hybrid, plug-in hybrid, electric, and CNG/LPG powertrains.
- Apply high-voltage and alternative-fuel safety protocols, including insulated tools and PPE.
- Inspect and maintain hybrid battery cooling and charging systems.
- Evaluate environmental and economic impacts of alternative-fuel technologies.

| **Priority Standards:** | **Learning Targets:** |
|---|---|
| ● **TE.TDL.1.B:** Analyze and explain what transportation vehicles are and how transportation vehicle systems work. | ● I can describe how hybrid, electric, and CNG/LPG powertrains operate.<br>● I can follow all high-voltage safety protocols, including the use of insulated tools.<br>● I can inspect and service a hybrid battery cooling system.<br>● I can discuss the environmental benefits and limitations of alternative fuels. |

**Supporting Standards:**

- **TE.TDL.1.A.a.2:** Identify how government regulations and technological trade-offs might influence the transportation modes used to move people and goods from one place to another.
- **TE.TDL.1.C.b.1:** Give examples of core content areas, including science, technology, engineering, and math, that are directly applicable to the transportation field.
- **TE.TDL.1.C.a.1:** Understand the applications of alternative power sources.
- **TE.TDL.1.C.a.5:** Understand how to maintain, diagnose, and repair vehicle electrical systems, both high-voltage and low-voltage.

| **Unit:** Shop Simulation | **Duration:** 15 days |
|---|---|

**Unit Objectives (overarching objectives):**

- Organize and manage a student-run service shop, including scheduling and workflow.
- Write accurate work orders, estimates, and invoices following industry format.
- Communicate effectively with “customers” (staff, community members, or peers).
- Demonstrate teamwork, time management, and professional conduct in a real-world setting.

| **Priority Standards:** | **Learning Targets:** |
|---|---|
| ● **TE.TDL.1.A:** Show an awareness of transportation vehicles and the role they play in society. | ● I can schedule jobs and track workflow in a team-run shop.<br>● I can create accurate work orders, estimates, and final invoices. |

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|---|---|
| • **TE.TDL.1.C:** Develop the skill set necessary to diagnose, problem-solve, and repair transportation vehicles. | • I can communicate clearly with customers and teammates in a professional manner.<br>• I can demonstrate punctuality, teamwork, and problem-solving skills expected in an industry shop. |

**Supporting Standards:**

- **TE.TDL.1.A.a.4:** Obtain certifications related to transportation systems, such as ASE and CDL, or complete a Youth Apprenticeship in a related transportation field, such as automotive, collision, or diesel.
- **TE.TDL.1.B.i.1**: Predict how a lack of maintenance can lead to degradation and premature failure.
- **TE.TDL.1.B.a.5:** Explain that all systems demand specific repair procedures in order to achieve the highest performance and efficiency in automotive, collision, or diesel areas.
- **TE.TDL.1.B.i.3:** Explain that a transportation system may lose efficiency or fail if one part is missing or malfunctioning or if a subsystem is not working properly.
- **TE.TDL.1.C.a.4:** Complete a work order, including customer information, description of repairs, and billing information, in accordance with applicable rules, laws, and regulations.
- **TE.TDL.1.C.a.6:** Understand the function and principles of automotive drivetrain, steering and suspension, brake, and tire and wheel components and systems in accordance with current national standards for various areas, such as Automotive Service Excellence (ASE) certification, Federal Motor Vehicle Safety Standards (FMVSS) issued by the National Highway Traffic Safety Administration (NHTSA).
- **TE.TDL.1.C.a.9:** Demonstrate safe and proficient use of specialty tools and equipment related to servicing transportation vehicles and their systems.
- **TE.TDL.1.C.a.14:** Earn an ASE Entry-Level Certification in motor vehicle/diesel repair or collision repair/finishing. Or complete a Youth Apprenticeship in a related repair career area.

## Basic Automotive

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|---|---|
| **Unit:** Introduction to Automotive | **Duration:** 4 days |
| **Unit Objectives (overarching objectives):** | |

- Understand the role of the automotive industry in society.
- Identify career pathways and certifications (ASE, OEM training, technical college).
- Learn basic vehicle systems and how they interact.
- Use of industry service information

| **Priority Standards:** | **Learning Targets:** |
|---|---|
| ● **TE.TDL.1.B:** Analyze and explain what transportation vehicles are and how transportation vehicle systems work. | ● I can identify the major systems of a vehicle and explain how they work together.<br>● I can decode a VIN to determine vehicle details.<br>● I can describe different career paths and certifications in the automotive industry.<br>● I can use Shopkeypro to find vehicle information. |

**Supporting Standards:**

- **TE.TDL.1.B.b.1:** Recognize that transportation vehicles & systems need to be properly maintained in order to prolong their useful life.
- **TE.TDL.1.B.b.2:** Explain that transportation vehicles have multiple components with different functions.
- **TE.TDL.1.B.b.3:** Explain that malfunctioning components must be repaired or replaced to restore intended operation.
- **TE.TDL.1.C.b.4:** List careers related to the transportation field.

| **Unit:** Automotive Safety | **Duration:** 5 days |
|---|---|

**Unit Objectives (overarching objectives):**

- Demonstrate proper use of PPE.
- Follow shop safety protocols for lifts, chemicals, fire, and electricity.
- Understand OSHA and school-specific safety requirements.

| **Priority Standards:** | **Learning Targets:** |
|---|---|
| ● **TE.TDL.1.B:** Analyze and explain | ● I can demonstrate proper use of PPE |

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| what transportation vehicles are and how transportation vehicle systems work. | in the shop.<br><br>● I can operate lifts, jacks, and hand/power tools safely.<br><br>● I can explain and follow shop safety rules, including chemical handling and fire prevention.<br><br>● I can locate and use safety equipment (fire extinguishers, eyewash station, etc.). |
| **Supporting Standards:**<br><br>● **TE.TDL.1.B.b.1:** Recognize that transportation vehicles & systems need to be properly maintained in order to prolong their useful life.<br>● **TE.TDL.1.B.b.2:** Explain that transportation vehicles have multiple components with different functions.<br>● **TE.TDL.1.B.b.3:** Explain that malfunctioning components must be repaired or replaced to restore intended operation.<br>● **TE.TDL.1.B.i.1:** Predict how a lack of maintenance can lead to degradation and premature failure.<br>● **TE.TDL.1.C.b.3:** Identify examples of safety related to the use of simple tools and equipment. | |

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| **Unit:** Preventative Maintenance | **Duration:** 8 days |
| **Unit Objectives (overarching objectives):**<br><br>● Perform routine checks and service (oil, fluids, belts, filters, wipers).<br>● Use service information and maintenance schedules.<br>● Document and communicate findings (service write-ups). | |
| **Priority Standards:**<br><br>● **TE.TDL.1.B:** Analyze and explain what transportation vehicles are and how transportation vehicle systems work. | **Learning Targets:**<br><br>● I can perform basic fluid checks and describe when service is needed.<br>● I can replace engine oil and filters according to manufacturer |

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| | recommendations.<br>● I can inspect belts, hoses, and wiper blades for wear.<br>● I can use a service schedule to identify required maintenance.<br>● I can record and communicate findings on a service report. |
| **Supporting Standards:**<br><br>● **TE.TDL.1.B.i.1:** Predict how a lack of maintenance can lead to degradation and premature failure.<br>● **TE.TDL.1.B.a.1:** Interpret preventive maintenance schedules and recommended service intervals for vehicles and systems.<br>● **TE.TDL.1.B.b.1:** Recognize that transportation vehicles & systems need to be properly maintained in order to prolong their useful life.<br>● **TE.TDL.1.C.i.3:** Operate transportation-related tools and equipment in a safe manner. | |

| **Unit:** Basic Brakes | **Duration:** 6 days |
|---|---|
| **Unit Objectives (overarching objectives):**<br><br>● Identify brake system components (disc, drum).<br>● Understand hydraulic principles.<br>● Perform inspections, pad/shoes, and rotor/drum measurements. | |
| **Priority Standards:**<br><br>● **TE.TDL.1.B:** Analyze and explain what transportation vehicles are and how transportation vehicle systems work. | **Learning Targets:**<br><br>● I can identify the major components of disc and drum brake systems.<br>● I can explain how hydraulic pressure creates braking force.<br>● I can inspect pads, rotors, shoes, and drums for wear and damage.<br>● I can perform a basic brake service (pad replacement, rotor inspection).<br>● I can create a quote for brake repair. |
| **Supporting Standards:** | |

- **TE.TDL.1.B.b.1:** Recognize that transportation vehicles & systems need to be properly maintained in order to prolong their useful life.
- **TE.TDL.1.B.b.3:** Explain that malfunctioning components must be repaired or replaced to restore intended operation.
- **TE.TDL.1.B.i.1:** Predict how a lack of maintenance can lead to degradation and premature failure.
- **TE.TDL.1.B.i.3:** Explain that a transportation system may lose efficiency or fail if one part is missing or malfunctioning or if a subsystem is not working properly.
- **TE.TDL.1.C.b.2:** Recognize the six simple machines in common products.
- **TE.TDL.1.C.i.3:** Operate transportation-related tools and equipment in a safe manner.

| **Unit:** Wheel and Tire | **Duration:** 7 days |
|---|---|
| **Unit Objectives (overarching objectives):**<br><br>● Identify tire markings and ratings.<br>● Inspect tires for wear and damage.<br>● Perform tire mounting, balancing, and rotations. | |
| **Priority Standards:**<br><br>● **TE.TDL.1.B:** Analyze and explain what transportation vehicles are and how transportation vehicle systems work. | **Learning Targets:**<br><br>● I can read tire sidewall markings to determine size, load, and speed ratings.<br>● I can measure tread depth and check tire pressure.<br>● I can identify different tire wear patterns and their causes.<br>● I can perform tire rotations correctly.<br>● I can mount and balance a tire using shop equipment.<br>● I can create a quote for tire repair. |
| **Supporting Standards:**<br><br>● **TE.TDL.1.B.b.1:** Recognize that transportation vehicles & systems need to be properly maintained in order to prolong their useful life.<br>● **TE.TDL.1.B.b.3:** Explain that malfunctioning components must be repaired or replaced to restore intended operation.<br>● **TE.TDL.1.B.i.1:** Predict how a lack of maintenance can lead to degradation and | |

premature failure.
- **TE.TDL.1.B.i.3:** Explain that a transportation system may lose efficiency or fail if one part is missing or malfunctioning or if a subsystem is not working properly.
- **TE.TDL.1.C.i.3:** Operate transportation-related tools and equipment in a safe manner.

| **Unit:** Automotive Electronics | **Duration:** 10 days |
|---|---|
| **Unit Objectives (overarching objectives):**<br><br>● Understand the basics of electricity (voltage, current, resistance).<br>● Use a multimeter for diagnostic testing.<br>● Identify starting, charging, and lighting system components. | |
| **Priority Standards:**<br><br>● **TE.TDL.1.B:** Analyze and explain what transportation vehicles are and how transportation vehicle systems work. | **Learning Targets:**<br><br>● I can explain the relationship between voltage, current, and resistance.<br>● I can safely use a digital multimeter to measure voltage, resistance, and continuity.<br>● I can identify and test basic electrical system components (battery, starter, alternator).<br>● I can interpret simple wiring diagrams.<br>● I can diagnose common electrical issues such as blown fuses or poor connections.<br>● I can use a scan tool to find diagnostic trouble codes.<br>● I can create a quote for electrical system repairs. |
| **Supporting Standards:**<br><br>● **TE.TDL.1.B.b.1:** Recognize that transportation vehicles & systems need to be properly maintained in order to prolong their useful life.<br>● **TE.TDL.1.B.b.3:** Explain that malfunctioning components must be repaired or replaced to restore intended operation.<br>● **TE.TDL.1.B.i.1:** Predict how a lack of maintenance can lead to degradation and premature failure. | |

- **TE.TDL.1.B.i.3:** Explain that a transportation system may lose efficiency or fail if one part is missing or malfunctioning or if a subsystem is not working properly.

| **Unit:** Cooling System | **Duration:** 5 days |
|---|---|
| **Unit Objectives (overarching objectives):**<br><br>● Identify cooling system components (radiator, pump, thermostat, hoses).<br>● Understand the flow of coolant and heat transfer.<br>● Perform inspection, pressure test, and coolant service. | |
| **Priority Standards:**<br><br>● **TE.TDL.1.B:** Analyze and explain what transportation vehicles are and how transportation vehicle systems work. | **Learning Targets:**<br><br>● I can identify the major components of an automotive cooling system.<br>● I can explain how the cooling system regulates engine temperature.<br>● I can perform a visual inspection of cooling system components.<br>● I can connect a scan tool to receive live data.<br>● I can create a quote for cooling system repair. |
| **Supporting Standards:**<br><br>● **TE.TDL.1.B.b.1:** Recognize that transportation vehicles & systems need to be properly maintained in order to prolong their useful life.<br>● **TE.TDL.1.B.b.3:** Explain that malfunctioning components must be repaired or replaced to restore intended operation.<br>● **TE.TDL.1.B.i.1:** Predict how a lack of maintenance can lead to degradation and premature failure.<br>● **TE.TDL.1.B.i.3:** Explain that a transportation system may lose efficiency or fail if one part is missing or malfunctioning or if a subsystem is not working properly.<br>● **TE.TDL.1.C.i.3:** Operate transportation-related tools and equipment in a safe manner. | |

## Building Construction I

| **Unit 1:** Construction Safety & Tool Use | **Duration:** 8 classes |
|---|---|
| **Unit Objective:**<br>● Students will demonstrate safe work practices and proper use of hand and power tools in a construction setting. | |
| **Priority Standards:**<br>● **TE.AC.2.A**: Demonstrate the safe and appropriate use of tools, materials, and processes in construction. | **Learning Targets ("I Can" Statements):**<br>● I can explain and follow classroom and shop safety rules.<br>● I can demonstrate safe operation of hand tools and power tools (circular saw, miter saw). |
| **Supporting Standards:**<br>● **TE.AC.2.A.b.1, b.2** (Identify and explain tool use and safety).<br>● **TE.AC.2.A.i.1, i.2** (Demonstrate proficiency in tool use). | |

| **Unit 2:** Plumbing & Tile Systems | **Duration:** 12 classes |
|---|---|
| **Unit Objective:**<br>● Students will apply basic plumbing and tiling techniques used in residential construction. | |
| **Priority Standards:**<br>● **TE.AC.3.A**: Demonstrate construction skills related to structural and finishing systems. | **Learning Targets ("I Can" Statements):**<br>● I can cut, fit, and solder copper pipe connections safely.<br>● I can plan and install a simple tile layout using appropriate tools and materials. |

**Supporting Standards:**

- **TE.AC.3.A.b.1** (Identify construction systems and components).
- **TE.AC.3.A.i.1** (Demonstrate basic residential construction techniques).

| **Unit 3:** Roofing Applications | **Duration**: 5 classes |
|---|---|
| **Unit Objective:**<br>● Students will install roofing materials using proper procedures to ensure durability and safety. | |
| **Priority Standards:**<br>● **TE.AC.3.A**: Demonstrate construction skills related to structural and finishing systems. | **Learning Targets ("I Can" Statements):**<br>● I can prepare and apply roofing underlayment materials.<br>● I can install shingles following correct alignment and fastening methods. |
| **Supporting Standards:**<br>● **TE.AC.2.A.a.1** (Properly and safely use common construction tools).<br>● **TE.AC.3.A.i.1** (Demonstrate basic roofing installation). | |

| **Unit 4:** Electrical Systems | **Duration**: 10 classes |
|---|---|
| **Unit Objective:**<br>● Students will wire basic residential circuits, including outlets, switches, and lighting fixtures. | |
| **Priority Standards:**<br>● **TE.AC.3.A**: Demonstrate construction | **Learning Targets ("I Can" Statements):**<br>● I can wire single and multiple-outlet |

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|---|---|
| skills related to structural and finishing systems. | circuits safely.<br>● I can install single-pole and three-way switches for lighting control. |
| **Supporting Standards:**<br><br>● **TE.AC.2.A.i.2** (Demonstrate safe and proper use of electrical tools).<br>● **TE.AC.3.A.i.1** (Apply electrical installation techniques). | |

| **Unit 5:** Wall Construction & Finishing | **Duration**: 10 classes |
|---|---|
| **Unit Objective:**<br><br>● Students will construct and finish a framed wall section using framing and drywall techniques. | |
| **Priority Standards:**<br><br>● **TE.AC.3.A**: Demonstrate construction skills related to structural and finishing systems. | **Learning Targets ("I Can" Statements):**<br><br>● I can frame and assemble a wall unit.<br>● I can install and finish drywall to a smooth surface. |
| **Supporting Standards:**<br><br>● **TE.AC.2.A.a.2** (Select correct tools for construction tasks).<br>● **TE.AC.3.A.i.1** (Demonstrate wall framing and finishing). | |

## Building Construction II

| **Unit 1:** Jobsite Safety and Tools | **Duration:** 4 classes |
|---|---|
| **Unit Objective:** | |

- Students will demonstrate safe and proficient use of hand and power tools while following construction site safety practices.

| **Priority Standards:** | **Learning Targets ("I Can" Statements):** |
|---|---|
| ● **TE.AC.2.A:** Demonstrate the safe and appropriate use of tools and equipment.<br>● **TE.AC.2.D:** Demonstrate project management processes for safe and productive work. | ● I can explain and apply personal protective equipment (PPE) requirements on a jobsite.<br>● I can identify, select, and properly use common hand tools and power tools.<br>● I can follow safety procedures when operating construction equipment. |

**Supporting Standards:**

- **TE.AC.2.A.i.1:** Demonstrate proficiency in the safe use of hand tools.
- **TE.AC.2.A.a.1:** Properly and safely use common tools and equipment.
- **TE.AC.2.D.b.1:** Explain and recognize the importance of safety on a jobsite.

| **Unit 2:** Plans and Specifications | **Duration:** 2 classes |
|---|---|

**Unit Objective:**

- Students will interpret and apply residential construction drawings and specifications to guide project work.

| **Priority Standards:** | **Learning Targets ("I Can" Statements):** |
|---|---|
| ● **TE.AC.2.C:** Apply measurement systems in the planning and construction of structures.<br>● **TE.AC.2.D:** Interpret and use construction documents for planning and building. | ● I can read and interpret residential blueprints.<br>● I can use measurement systems to mark, cut, and build to specifications.<br>● I can apply scaling and dimensioning in construction layouts. |

**Supporting Standards:**

- **TE.AC.2.C.i.3:** Demonstrate basic dimensioning techniques.
- **TE.AC.2.C.a.3:** Understand the use of an architect's or engineer's scale.
- **TE.AC.2.D.a.1:** Interpret and use construction documents.

| **Unit 3:** Building Materials and Systems | **Duration**: 5 classes |
|---|---|
| **Unit Objective:**<br><br>● Students will identify, evaluate, and apply appropriate construction materials and building systems for residential projects. | |
| **Priority Standards:**<br><br>● **TE.AC.2.B:** Analyze construction requirements, methods, and materials for structures.<br>● **TE.AC.2.C:** Apply measurement and material estimation in construction planning. | **Learning Targets ("I Can" Statements):**<br><br>● I can identify lumber, engineered products, and fasteners used in construction.<br>● I can explain the function of structural systems such as foundations, framing, and roofing.<br>● I can select appropriate materials for different stages of a residential project. |
| **Supporting Standards:**<br><br>● **TE.AC.2.B.i.2:** Explain the function of foundations, walls, and roofs.<br>● **TE.AC.2.B.a.4:** Compare building materials based on performance.<br>● **TE.AC.2.C.a.2:** Calculate required materials for construction projects. | |

| **Unit 4:** Residential Construction Practices | **Duration**: 34 days |
|---|---|
| **Unit Objective:**<br><br>● Students will participate in hands-on construction projects applying framing, siding, | |

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|---|---|
| roofing, and finishing skills. | |
| **Priority Standards:**<br><br>● **TE.AC.2.A:** Demonstrate safe and appropriate use of construction tools and equipment.<br>● **TE.AC.2.B:** Apply construction processes to residential building projects. | **Learning Targets ("I Can" Statements):**<br><br>● I can demonstrate correct techniques for wall, roof, and stair framing.<br>● I can install siding, doors, windows, and trim to industry standards.<br>● I can collaborate effectively with peers to complete construction tasks safely and efficiently. |
| **Supporting Standards:**<br><br>● **TE.AC.2.A.a.3:** Demonstrate proficiency in tool use during construction.<br>● **TE.AC.2.B.i.1:** Select designs for structures based on site and purpose.<br>● **TE.AC.2.B.a.3:** Analyze how structures require integration of systems. | |

## Electronics & Electricity I Curriculum

| **Unit 1:** Introduction to Electrical Principles | **Unit Duration:** 5 Days |
|---|---|
| **Unit Objectives:**<br><br>● Understand the basic principles of electricity, including charge, current, and voltage.<br>● Differentiate between conductors, insulators, and semiconductors.<br>● Identify different sources of electricity, such as chemical, mechanical, and photovoltaic. | |
| **Priority Standards:**<br><br>● **TE.EEC.11.A.b.8**: Identify the ampere as the unit of measure of flow of current in circuits. | **Learning Targets:**<br><br>● **I can** explain the concepts of voltage and current.<br>● **I can** differentiate between conductors, insulators, and semiconductors.<br>● **I can** describe different ways electricity is generated. |

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**Supporting Standards:**

- **TE.EEC.11.A.b.9**: Demonstrate creating static electricity through triboelectric charging or rubbing electrons off an insulator, such as plastic gas cans on a plastic bed liner.

| **Unit 2:** Power Distribution & Energy Efficiency | **Unit Duration:** 3 Days |
|---|---|

**Unit Objectives:**

- Understand how electricity is transmitted and distributed.
- Analyze power consumption and energy efficiency strategies.
- Explore renewable energy sources and smart grid technologies.

| **Priority Standards:** | **Learning Targets:** |
|---|---|
| ● **TE.EEC.12.A.b.8**: Describe how and why power transfer is maximized when voltage and current are in phase. | ● **I can** explain how electricity is transmitted over long distances.<br>● **I can** analyze household energy consumption.<br>● **I can** describe ways to improve electrical efficiency. |

**Supporting Standards:**

- **TE.EEC.12.A.i.8**: Contrast apparent power, reactive power, real power, and power factor.

| **Unit 3:** AC Current & House Wiring | **Unit Duration:** 8 Days |
|---|---|

**Unit Objectives:**

- Understand the properties of alternating current (AC) and its advantages over direct

current (DC).
- Learn the fundamentals of residential electrical wiring, including safety protocols.
- Identify and apply National Electrical Code (NEC) guidelines for home wiring.

| **Priority Standards:** | **Learning Targets:** |
|---|---|
| ● **TE.EEC.12.A.i.6**: Describe the advantages of the modern AC power grid compared to Edison's proposed DC grid. | ● **I can** explain the difference between AC and DC electricity.<br>● **I can** describe how electricity is delivered to homes and businesses.<br>● **I can** wire a basic residential circuit following NEC guidelines. |

**Supporting Standards:**

- **TE.EEC.12.A.b.7**: Contrast the use of transformers to change voltage with the use of resistance to change voltages.

| **Unit 4:** Electromagnetism & Induction | **Unit Duration:** 3 Days |
|---|---|

**Unit Objectives:**

- Explain the relationship between electricity and magnetism.
- Understand electromagnetic induction and its role in power generation.
- Explore applications of electromagnets, transformers, and motors.

| **Priority Standards:** | **Learning Targets:** |
|---|---|
| ● **TE.EEC.12.A.b.1**: Observe that current can be induced in a conductor by a changing magnetic field.<br>● **TE.EEC.12.A.i.1**: Observe that the amount of current induced depends on the rate of change of the field, the number of magnetic lines of force cut, and the magnetic permeability of the medium. | ● **I can** explain how electricity and magnetism are related.<br>● **I can** describe how transformers work.<br>● **I can** identify real-world applications of electromagnetic induction. |

**Supporting Standards:**

- **TE.EEC.12.A.b.2**: Describe the magnetic lines of flux present around a current-carrying conductor.

| **Unit 5:** Electrical Components & Circuit Design | **Unit Duration:** 6 Days |
|---|---|
| **Unit Objectives:**<br>● Identify common electrical components, such as resistors, capacitors, and inductors.<br>● Understand series and parallel circuits.<br>● Analyze circuit diagrams and build basic electrical circuits. | |
| **Priority Standards:**<br>● **TE.EEC.11.B.b.3**: Identify batteries, capacitors, and inductors as electrical energy storage devices.<br>● **TE.EEC.11.B.i.3**: Describe how batteries, capacitors, and inductors store energy chemically, electrostatically, and inductively. | **Learning Targets:**<br>● **I can** identify and explain the function of resistors, capacitors, and inductors.<br>● **I can** differentiate between series and parallel circuits.<br>● **I can** read and interpret basic circuit diagrams. |
| **Supporting Standards:**<br>● **TE.EEC.11.B.b.5**: Identify units of power in watts. | |

| **Unit 6:** Semiconductors & Digital Electronics | **Unit Duration:** 5 Days |
|---|---|
| **Unit Objectives:**<br>● Explain how semiconductors function in modern electronics.<br>● Understand the role of diodes, transistors, and integrated circuits. | |

<table>
<tr><td colspan="2">

- Explore basic digital logic circuits.

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**Priority Standards:**

- **TE.EEC.11.A.b.6**: Explain why elements with four valence electrons (e.g., carbon, silicon) form the basis for semiconductors.

</td><td>

**Learning Targets:**

- **I can** describe how semiconductors are used in electronics.
- **I can** identify different types of diodes and transistors.
- **I can** build and test basic digital circuits.

</td></tr>
<tr><td colspan="2">

**Supporting Standards:**

- **TE.EEC.11.A.i.6**: Describe applications of elements with four valence electrons as semiconductors.
- **TE.EEC.11.A.a.6**: Explain how doping of semiconductors can produce P-type and N-type semiconductors.

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**Unit 7:** Circuit Assembly & Soldering Techniques

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**Unit Duration:** 6 Days

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**Unit Objectives:**

- Learn proper soldering techniques for circuit board assembly.
- Understand the importance of clean connections in electrical circuits.
- Build and test functioning electrical circuits using soldering skills.

</td></tr>
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**Priority Standards:**

- **TE.EEC.11.A.b.5**: Identify a resistor's resistance by its color code.
- **TE.EEC.11.A.i.5**: Identify a resistor's error tolerance by its color code.

</td><td>

**Learning Targets:**

- I can demonstrate proper soldering techniques to assemble a functional circuit board.
- I can explain the importance of clean and secure electrical connections in a circuit.
- I can identify a resistor's resistance and error tolerance using the color code system.

</td></tr>
</table>

| | |
|---|---|
| | ● I can correlate resistor size with its power capacity and apply this knowledge to circuit design. |
| **Supporting Standards:**<br><br>● **TE.EEC.11.A.a.5**: Correlate resistor size with its power capacity. | |

| **Unit 8:** Ohm's Law & Electrical Calculations | **Unit Duration:** 6 Days |
|---|---|
| **Unit Objectives:**<br><br>● Apply Ohm's Law to analyze electrical circuits.<br>● Perform voltage, current, and resistance calculations.<br>● Understand the relationship between power, voltage, and current. | |
| **Priority Standards:**<br><br>● **TE.EEC.11.B.i.5**: Use Ohm's Law to explain why Voltage * Current = Power. | **Learning Targets:**<br><br>● **I can** use Ohm's Law to calculate voltage, current, and resistance.<br>● **I can** explain the relationship between power, voltage, and current.<br>● **I can** apply Ohm's Law to troubleshoot circuits. |
| **Supporting Standards:** | |

| **Unit 9:** Electrical Safety & Troubleshooting | **Unit Duration:** 3 Days |
|---|---|
| **Unit Objectives:**<br><br>● Learn about electrical hazards and safety precautions.<br>● Develop troubleshooting techniques for diagnosing circuit issues.<br>● Understand how to use a multimeter effectively. | |

| | |
|---|---|
| **Priority Standards:**<br><br>● **TE.EEC.12.A.b.9**: Observe that because current can be observed at a single point, inductively coupled probes need only access the circuit in one location. | **Learning Targets:**<br><br>● **I can** identify common electrical hazards and safety measures.<br>● **I can** diagnose and fix simple circuit issues.<br>● **I can** use a multimeter to measure voltage, current, and resistance. |
| **Supporting Standards:**<br><br>● **TE.EEC.12.A.i.9**: Explain the operation of an inductively coupled current probe. | |

## Electronics 2 - Advanced Electronics & Electricity Curriculum Guide

| **Unit 1:** Advanced Electrical Safety & Troubleshooting | **Unit Duration:** 5 Day |
|---|---|
| **Unit Objectives:**<br><br>● Identify and mitigate electrical hazards in advanced circuits.<br>● Develop troubleshooting techniques using diagnostic tools.<br>● Understand National Electrical Code (NEC) safety standards. | |
| **Priority Standards:**<br><br>● **TE.EEC.2.A:** Recognize and control electrical hazards to work safely.<br><br>● **TE.EEC.7.A:** Diagnose circuit faults. | **Learning Targets:**<br><br>● I can identify electrical hazards and apply safety measures.<br>● I can diagnose circuit issues using troubleshooting techniques.<br>● I can apply NEC safety codes when working on electrical systems. |
| **Supporting Standards:** | |

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|---|
| ● **TE.EEC.5.B:** Interpret the National Electrical Code (NFPA 70E).<br>● **TE.EEC.7.C:** Measure voltage, current, and resistance with a multimeter. |

| **Unit 2:** Advanced House Wiring | **Unit Duration:** 10 Days |
|---|---|
| **Unit Objectives:**<br><br>● Wire breaker panel boxes and three-way switches.<br>● Diagnose and repair faulty wiring using NEC standards.<br>● Apply residential and commercial wiring techniques. | |
| **Priority Standards:**<br><br>● **TE.EEC.4.A:** Perform electrical and electronic fabrication and maintenance tasks.<br><br>● **TE.EEC.5.B:** Interpret the National Electrical Code (NFPA 70E). | **Learning Targets:**<br><br>● I can wire a breaker panel box according to NEC regulations.<br>● I can install and troubleshoot three-way and four-way switches.<br>● I can diagnose and correct wiring issues safely and effectively. |
| **Supporting Standards:**<br><br>● **TE.EEC.7.A:** Diagnose circuit faults.<br>● **TE.EEC.7.C:** Measure voltage, current, and resistance with a multimeter. | |

| **Unit 3:** AC Motors & Three-Phase Systems | **Unit Duration:** 8 Days |
|---|---|
| **Unit Objectives:**<br><br>● Read and interpret motor faceplates.<br>● Understand and wire three-phase motors and controls.<br>● Analyze power factor and motor efficiency. | |
| **Priority Standards:** | **Learning Targets:** |

| | |
|---|---|
| • **TE.EEC.10.A:** Describe electrically powered actuators.<br><br>• **TE.EEC.15.A:** Calculate voltage, current, and resistance using Ohm's Law. | • I can read and interpret electrical specifications on motor faceplates.<br>• I can wire three-phase motors and understand their applications.<br>• I can analyze motor performance based on electrical parameters. |
| **Supporting Standards:**<br><br>• **TE.EEC.12.A:** Describe inductive and capacitive coupling phenomena.<br>• **TE.EEC.15.B:** Calculate circuit power. | |

| | |
|---|---|
| **Unit 4:** Advanced Circuit Design & Assembly | **Unit Duration:** 7 Days |
| **Unit Objectives:**<br><br>• Design and build complex electrical circuits.<br>• Implement advanced troubleshooting techniques.<br>• Use multimeters, oscilloscopes, and other diagnostic tools. | |
| **Priority Standards:**<br><br>• **TE.EEC.5.A:** Interpret electrical diagrams.<br><br>• **TE.EEC.7.E:** Observe waveforms using an oscilloscope. | **Learning Targets:**<br><br>• I can design and assemble complex electronic circuits.<br>• I can analyze and troubleshoot electrical circuits effectively.<br>• I can use oscilloscopes and multimeters for circuit testing. |
| **Supporting Standards:**<br><br>• **TE.EEC.11.B:** Relate electrical quantities to mechanical force, work, and power.<br>• **TE.EEC.15.C:** Solve problems using Boolean algebra. | |

| **Unit 5:** Advanced Soldering & PCB Fabrication | **Unit Duration:** 6 Days |
|---|---|
| **Unit Objectives:**<br><br>● Solder and assemble an advanced electronic circuit.<br>● Develop skills in Printed Circuit Board (PCB) fabrication.<br>● Ensure high-quality connections and circuit reliability. | |
| **Priority Standards:**<br><br>● **TE.EEC.4.A:** Perform electrical and electronic fabrication and maintenance tasks.<br><br>● **TE.EEC.11.A:** Describe the flow of electrons through circuits. | **Learning Targets:**<br><br>● I can solder and assemble advanced electrical circuits with precision.<br>● I can design and fabricate a PCB for a functional circuit.<br>● I can apply quality control measures in circuit construction. |
| **Supporting Standards:**<br><br>● **TE.EEC.7.A:** Diagnose circuit faults.<br>● **TE.EEC.7.B:** Test electrical circuits using analog devices. | |

| **Unit 6:** Power Systems & Energy Efficiency | **Unit Duration:** 5 Days |
|---|---|
| **Unit Objectives:**<br><br>● Analyze power transmission and energy efficiency.<br>● Optimize electrical systems for energy conservation.<br>● Compare renewable and non-renewable power sources. | |
| **Priority Standards:**<br><br>● **TE.EEC.3.A:** Categorize applications of electrical and electronic technologies.<br><br>● **TE.EEC.15.B:** Calculate circuit power. | **Learning Targets:**<br><br>● I can analyze electrical power systems and their efficiency.<br>● I can assess energy conservation methods in electrical systems.<br>● I can compare different power generation methods. |

**Supporting Standards:**

- **TE.EEC.12.A:** Describe inductive and capacitive coupling phenomena.
- **TE.EEC.15.A:** Calculate voltage, current, and resistance using Ohm's Law.

| **Unit 7:** Final Project & Industry Applications | **Unit Duration:** 4 Days |
|---|---|
| **Unit Objectives:**<br><br>● Apply learned skills to a capstone project.<br>● Research career pathways in electrical and electronics industries.<br>● Present findings and demonstrate project functionality. | |
| **Priority Standards:**<br><br>● **TE.EEC.1.C:** Compare and contrast non-degree, degree, and licensure pathways.<br><br>● **TE.EEC.6.A:** Describe electrical failure modes and the associated engineering safeguards. | **Learning Targets:**<br><br>● I can apply my skills in a real-world electrical or electronics project.<br>● I can explore career pathways in electrical and electronics industries.<br>● I can present my project and demonstrate its functionality. |
| **Supporting Standards:**<br><br>● **TE.EEC.1.A:** Understand the evolving nature of electrical, electronics, and controls industries.<br>● **TE.EEC.7.A:** Diagnose circuit faults. | |

## Graphic Design I

| **Unit 1:** Foundations of Vector Graphics | **Duration:** Weeks 1-3 |
|---|---|
| **Unit Objectives** | |

- Explore careers in information and communication technologies.
- Understand vector graphic fundamentals and industry context.
  Draw and manipulate basic shapes and paths using vector tools.

| **Priority Standards** | **Learning Targets ("I Can" Statements):** |
|---|---|
| ● **TE.ICT.1**: Students will explore careers in information and communication technologies.<br>● **TE.ICT.2**: Students will analyze, select, and use information and communication technologies. | ● Draw every basic shape and manipulate them with alignment and grouping.<br>● Use pen tool to create smooth paths and adjust anchor points.<br>● Utilize modifier keys to constrain shapes and pen tool.<br>● Analyze the ICT industry and vector graphic career paths.<br>● Identify and apply basic elements and principles of design. |

**Supporting Standards:**

- Analyze the communication process within design workflows.
- Analyze technologies producing printed graphics.

| **Unit 2:** Color, Stroke, and Type Manipulation | **Duration:** Weeks 4-6 |
|---|---|

**Unit Objective:**

- Demonstrate skills using graphic design, editing, and creation software.
- Apply color fills, strokes, gradients, and transparency in vector art.
- Manipulate type formatting and placement.

| **Priority Standards:** | **Learning Targets ("I Can" Statements):** |
|---|---|
| ● **TE.ICT.1**: Students will explore careers in information and communication technologies. | Draw every basic shape and manipulate them with alignment and grouping.<br>● Use pen tool to create smooth paths and adjust anchor points. |

| | |
|---|---|
| ● **TE.ICT.2**: Students will analyze, select, and use information and communication technologies. | ● Utilize modifier keys to constrain shapes and pen tool.<br>● Analyze the ICT industry and vector graphic career paths.<br>● Identify and apply basic elements and principles of design. |
| **Supporting Standards:**<br><br>● Analyze the communication process within design workflows.<br>● Analyze technologies producing printed graphics. | |

| | |
|---|---|
| **Unit 3:** Advanced Path and Type Techniques | **Duration**: **Weeks 7-9** |
| **Unit Objective:**<br><br>● Demonstrate advanced proficiency with graphic design software.<br>● Create compound paths and hollow shapes.<br>● Use blending tools for color and shape transitions.<br>● Explore careers and skills in manufacturing technology related to design production. | |
| **Priority Standards:**<br><br>● **TE.ICT.1**: Students will explore careers in information and communication technologies.<br><br>● **TE.ICT.2**: Students will analyze, select, and use information and communication technologies.<br><br>● **TE.MFG.1**: Students will explore careers in manufacturing.<br><br>● **TE.MFG.2**: Students will be able to select and use manufacturing technologies. | **Learning Targets ("I Can" Statements):**<br><br>● Create compound paths and reshape type outlines.<br>● Use blend tool to create smooth blends and adjust blend spines.<br>● Analyze and apply design principles in complex illustrations.<br>● Analyze technologies producing printed graphics.<br>● Analyze the manufacturing industry and related career paths.<br>● Identify, select, and safely use tools and systems relevant to manufacturing/design. |

**Supporting Standards:**

- Analyze communication methods and future changes in design communication.
- Select technologies for website graphics when applicable.
- Demonstrate respect and cooperation in team settings.

| **Unit 4:** Masking and Transformation Techniques | **Duration**: Weeks 10-12 |
|---|---|

**Unit Objective:**

- Demonstrate knowledge using graphic creation software for masking and transformations.
- Apply clipping masks using shapes and type.
- Create logos using transformation tools.
- Understand manufacturing processes in product design and branding.

| **Priority Standards:** | **Learning Targets ("I Can" Statements):** |
|---|---|
| ● **TE.ICT.1**: Students will explore careers in information and communication technologies.<br>● **TE.ICT.2**: Students will analyze, select, and use information and communication technologies.<br>● **TE.MFG.1**: Students will explore careers in manufacturing.<br>● **TE.MFG.2**: Students will be able to select and use manufacturing technologies. | ● Mask artwork with shapes and type; edit masks and masked objects.<br>● Trace logos using pen and pathfinder tools; create logos with hollow areas.<br>● Apply elements and principles of design effectively in logos.<br>● Analyze and use technologies for printed graphic products.<br>● Select, use, and identify manufacturing processes relevant to product branding.<br>● Create and communicate manufacturing-related business solutions. |

**Supporting Standards:**

- Analyze communication methods and future changes in design communication.
- Select technologies for website graphics when applicable.
- Demonstrate respect and cooperation in team settings.

## Graphic Design II

<table>
<tr><td>Unit 1: Industry Overview and Design Fundamentals</td><td>Duration: 3 weeks</td></tr>
<tr><td colspan="2">Unit Objectives<br><br>● Explore careers and industries in ICT and manufacturing.<br>● Understand basic design principles and elements.<br>● Analyze communication processes and graphic design software.</td></tr>
<tr><td>Priority Standards<br><br>● TTE.ICT.1: Explore careers in information and communication technologies.<br><br>● TE.ICT.2.D: Identify, apply, and analyze the elements and principles of design.<br><br>● TE.MFG.1: Explore careers in manufacturing.</td><td>Learning Targets (“I Can” Statements):<br><br>● Draw every basic shape and manipulate them with alignment and grouping.<br>● Use pen tool to create smooth paths and adjust anchor points.<br>● Utilize modifier keys to constrain shapes and pen tool.<br>● Analyze the ICT industry and vector graphic career paths.<br>● Identify and apply basic elements and I can research and explain careers in graphic design and manufacturing.<br>● I can identify and apply key design elements and principles in projects.<br>● I can analyze how communication shapes design in ICT.<br>● principles of design.</td></tr>
<tr><td colspan="2">Supporting Standards:<br><br>● TE.ICT.1.A: Analyze the ICT industry.<br>● TE.ICT.2.A: Analyze communication processes and purposes.<br>● TE.MFG.1.A: Analyze the manufacturing industry.<br>● Analyze the communication process within design workflows.<br>● Analyze technologies producing printed graphics.</td></tr>
</table>

| **Unit 2:** Advanced Graphic Design Tools and Techniques | **Duration:** 3 weeks |
|---|---|
| **Unit Objective:**<br><br>● Master advanced graphic design software skills (Adobe Illustrator, After Effects, Photoshop).<br>● Apply design elements in complex projects.<br>● Explore photographic media technologies. | |
| **Priority Standards:**<br><br>● **TE.ICT.2.B:** Demonstrate graphic design, editing, and creation software skills.<br><br>● **TE.ICT.2.C:** Analyze and use photographic media technologies. | **Learning Targets ("I Can" Statements):**<br>Draw every basic shape and manipulate them with alignment and grouping.<br><br>● I can create advanced graphics using multiple software tools.<br>● I can edit photographic media to enhance design projects.<br>● I can produce print-ready design files using appropriate software.<br>● I can apply design principles consistently in complex projects. |
| **Supporting Standards:**<br><br>● **TE.ICT.2.D:** Apply design elements and principles.<br>● **TE.ICT.2.E:** Use technologies to produce printed graphic communication products. | |

| **Unit 3:** Manufacturing Technologies and Processes | **Duration**: 3 weeks |
|---|---|
| **Unit Objective:**<br><br>● Explore manufacturing tools, machines, and systems.<br>● Understand safety and proper use of manufacturing technologies.<br>● Analyze manufacturing processes such as CNC machining, welding, casting, etc. | |

| **Priority Standards:** | **Learning Targets (“I Can” Statements):** |
|---|---|
| ● **TE.MFG.2.A**: Identify, select, and safely use manufacturing tools and machines.<br>● **TE.MFG.2.D:** Select and identify manufacturing processes.<br>● **TE.MFG.2.F:** Select and understand manufacturing technologies. | ● I can identify and safely use manufacturing tools and machines.<br>● I can describe various manufacturing processes and their applications.<br>● I can explain how manufacturing technologies integrate with design.<br>● I can analyze materials and cutting techniques used in manufacturing. |
| **Supporting Standards:**<br>● **TE.MFG.1.A:** Analyze the manufacturing industry.<br>● **TE.MFG.2.E:** Select and identify manufacturing systems.<br>● **TE.MFG.2.H:** Analyze materials and cutting operations. | |

| **Unit 4:** Design for Manufacturing & Production | **Duration**: **Weeks** 3 weeks |
|---|---|
| **Unit Objective:**<br>● Create graphic designs optimized for manufacturing processes.<br>● Apply principles of printed and digital communication products.<br>● Analyze workflows from design to manufacturing output. | |
| **Priority Standards:**<br>● **TE.ICT.2.E:** Use technologies to produce printed graphic communication products.<br>● **TE.MFG.2.B:** Create and communicate business solutions related to manufacturing.<br>● **TE.MFG.2.G:** Analyze and use welding technologies (overview). | **Learning Targets (“I Can” Statements):**<br>● I can design graphics that are manufacturable using industry standards.<br>● I can communicate effectively in business contexts related to design and manufacturing.<br>● I can outline the production workflow from design to finished product.<br>● I demonstrate professional respect and teamwork in manufacturing projects. |

**Supporting Standards:**

- **TE.ICT.2.D:** Apply design principles.
- **TE.MFG.2.C:** Demonstrate respect and cooperation in manufacturing settings.

## Home and Auto

| **Unit:** Vehicle Identification | **Duration**: 7 days |
|---|---|
| **Unit Objective (overarching objectives):**<br><br>● Identify major vehicle types (sedan, SUV, truck, hybrid, EV, etc.) and their typical uses.<br>● Locate and interpret the Vehicle Identification Number (VIN) to find year, make, model, and country of manufacture.<br>● Recognize key exterior and interior components (e.g., engine bay, drivetrain layout, safety systems).<br>● Use online and print resources (owner's manual, manufacturer sites) to verify vehicle specifications.<br>● Explain how to match a vehicle's features to specific consumer needs (commuting, towing, efficiency, etc.). | |
| **Priority Standards:**<br><br>● **TE.TDL.1.A:** Show an awareness of transportation vehicles and the role they play in society. | **Learning Targets:**<br><br>● I can locate and read a Vehicle Identification Number (VIN) to find a car's year, make, and model.<br>● I can recognize common vehicle body styles (sedan, SUV, truck, hybrid, EV, etc.) and explain typical uses for each.<br>● I can point out major exterior and interior parts of a vehicle and describe their purpose.<br>● I can use an owner's manual or reliable website to confirm a vehicle's specifications.<br>● I can match a vehicle's features to a driver's specific needs, such as commuting or towing. |

**Supporting Standards:**

- **TE.TDL.1.A.a.3:** Relate how the current and future design of advanced transportation systems depends on many innovative materials and processes.
- **TE.TDL.1.B.a.3:** Identify vehicle structural parts and cosmetic parts.
- **TE.TDL.1.C.i.6:** Successfully put into practice SkillsUSA activities, such as leadership and career exploration.

| **Unit:** Vehicle Purchasing | **Duration**: 10 days |
|---|---|

**Unit Objective (overarching objectives):**

- Compare buying new vs. used vehicles, and leasing vs. financing, noting advantages and disadvantages of each.
- Read and interpret a bill of sale, purchase agreement, and basic loan/lease terms (APR, down payment, monthly payment).
- Research fair market prices using tools such as Kelley Blue Book or other reputable sources.
- Evaluate factors like warranties, vehicle history reports, and pre-purchase inspections.
- Simulate a negotiation scenario to practice consumer communication skills.

| **Priority Standards:** | **Learning Targets:** |
|---|---|
| ● **TE.TDL.1.B:** Analyze and explain what transportation vehicles are and how transportation vehicle systems work.<br>● **TE.TDL.1.C:** Develop the skill set necessary to diagnose, problem-solve, and repair transportation vehicles. | ● I can explain the differences between buying new, buying used, leasing, and financing.<br>● I can research and compare prices using trusted sources like Kelley Blue Book.<br>● I can read a sample sales contract and identify important terms such as APR, down payment, and monthly payment.<br>● I can describe why a pre-purchase inspection and a vehicle history report are important.<br>● I can practice negotiation strategies to get a fair deal on a vehicle. |

**Supporting Standards:**

- **TE.TDL.1.C.b.1:** Give examples of core content areas, including science, technology, engineering, and math, that are directly applicable to the transportation field.
- **TE.TDL.1.C.i.1:** Use science, technology, engineering, and math (STEM) to solve problems related to the transportation field.

| **Unit:** Vehicle Expenses | **Duration**: 4 days |
|---|---|
| **Unit Objective (overarching objectives):**<br><br>● Develop a monthly and annual budget for total cost of ownership, including fuel, insurance, maintenance, depreciation, and registration.<br>● Compare insurance coverage options (liability, collision, comprehensive) and explain how driving record and vehicle type affect rates.<br>● Calculate fuel cost per mile and estimate annual fuel expenses based on mileage and fuel efficiency.<br>● Explain the concept of depreciation and how it affects resale value.<br>● Create a mock spreadsheet tracking vehicle expenses over a one-year period. | |
| **Priority Standards:**<br><br>● **TE.TDL.1.B:** Analyze and explain what transportation vehicles are and how transportation vehicle systems work. | **Learning Targets:**<br><br>● I can create a budget that includes insurance, fuel, maintenance, registration, and depreciation.<br>● I can calculate fuel cost per mile and estimate annual fuel expenses based on MPG and mileage.<br>● I can compare different types of auto insurance and explain what affects insurance rates.<br>● I can explain how depreciation reduces a car's value over time.<br>● I can track and record vehicle expenses in a spreadsheet for one year. |
| **Supporting Standards:**<br><br>● **TE.TDL.1.B.i.1:** Predict how a lack of maintenance can lead to degradation and premature failure. | |

- **TE.TDL.1.A.a.2:** Identify how government regulations and technological trade-offs might influence the transportation modes used to move people and goods from one place to another.
- **TE.TDL.1.C.b.1:** Give examples of core content areas, including science, technology, engineering, and math, that are directly applicable to the transportation field.

| **Unit:** Preventative Maintenance | **Duration**: 6 days |
|---|---|
| **Unit Objective (overarching objectives):**<br><br>● Identify routine maintenance tasks (oil changes, tire rotation, fluid checks, brake inspections, battery care) and recommended service intervals.<br>● Demonstrate basic checks—tire pressure, fluid levels, windshield wipers, and lights—for safety and performance.<br>● Interpret manufacturer maintenance schedules and warranty requirements.<br>● Explain the relationship between preventative maintenance and vehicle longevity, safety, and cost savings.<br>● Recognize warning lights and describe appropriate first responses. | |
| **Priority Standards:**<br><br>● **TE.TDL.1.B:** Analyze and explain what transportation vehicles are and how transportation vehicle systems work. | **Learning Targets:**<br><br>● I can identify routine maintenance tasks—such as oil changes, tire rotations, and fluid checks—and know when they should be done.<br>● I can check tire pressure, fluid levels, wiper blades, and lights to ensure safe operation.<br>● I can read a manufacturer's maintenance schedule and explain why following it protects the warranty.<br>● I can connect regular maintenance to better performance, safety, and long-term cost savings.<br>● I can recognize dashboard warning lights and describe the first step I should take when one appears. |
| **Supporting Standards:** | |

- **TE.TDL.1.B.i.1:** Predict how a lack of maintenance can lead to degradation and premature failure.
- **TE.TDL.1.B.a.3:** Identify vehicle structural parts and cosmetic parts.
- **TE.TDL.1.C.b.3:** Identify examples of safety related to the use of simple tools and equipment.

| **Unit:** Alternative Fueled Vehicles | **Duration**: 5 days |
|---|---|
| **Unit Objective (overarching objectives):**<br><br>● Distinguish among alternative powertrains: hybrid, plug-in hybrid, battery electric, hydrogen fuel cell, and biofuel vehicles.<br>● Compare environmental impacts, fuel/charging infrastructure, and operating costs to traditional gasoline vehicles.<br>● Evaluate pros and cons of owning or leasing an alternative-fueled vehicle based on driving habits and local resources.<br>● Describe current trends in government incentives, tax credits, and emissions regulations.<br>● Discuss emerging technologies and their potential influence on the future of personal transportation. | |
| **Priority Standards:**<br><br>● **TE.TDL.1.A:** Show an awareness of transportation vehicles and the role they play in society. | **Learning Targets:**<br><br>● I can identify different types of alternative-fueled vehicles, including hybrids, electric vehicles, hydrogen fuel cells, and biofuel cars.<br>● I can compare the environmental impact and operating costs of alternative-fueled vehicles to gasoline-powered vehicles.<br>● I can evaluate whether an alternative-fueled vehicle fits a person's driving habits and local charging or fueling options.<br>● I can describe current government incentives or tax credits that encourage alternative-fuel vehicle ownership.<br>● I can discuss how new technologies might change personal transportation |

| | |
|---|---|
| | in the future. |

**Supporting Standards:**

- **TE.TDL.1.A.a.2:** Identify how government regulations and technological trade-offs might influence the transportation modes used to move people and goods from one place to another.
- **TE.TDL.1.C.b.1:** Give examples of core content areas, including science, technology, engineering, and math, that are directly applicable to the transportation field.

| **Unit:** Home Purchasing | **Duration**: 5 days |
|---|---|

**Unit Objective (overarching objectives):**

- Identify and describe each major step of the home-buying process, from pre-approval through closing.
- Compare types of mortgages and financing options, noting key advantages and disadvantages.
- Calculate an affordable monthly housing payment using income, debt, and credit information.
- Analyze the long-term costs of homeownership, including taxes, insurance, and maintenance.
- Evaluate the pros and cons of buying versus renting for different life situations.
- Interpret a sample real estate listing and purchase contract to locate important terms and conditions.
- Create a mock home-purchase plan that includes location, financing choice, and estimated total cost.

| **Priority Standards:** | **Learning Targets:** |
|---|---|
| ● **TE.AC.2.C:** Apply measurement systems in the planning and layout process used in the construction industry. | ● I can explain each step of the home-buying process from pre-approval to closing.<br>● I can describe and compare different mortgage types, including their advantages and disadvantages.<br>● I can calculate how much house I can afford using income, debt, and credit information. |

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| | ● I can identify additional costs of owning a home such as property taxes, insurance, and maintenance.<br>● I can weigh the pros and cons of buying a home versus renting.<br>● I can read and interpret a real estate listing and purchase contract to find key terms and conditions.<br>● I can create a mock home-buying plan that includes a budget, financing option, and location choice. |
| **Supporting Standards:**<br><br>● **TE.AC.2.C.b.1:** Recognize and identify the rooms in a home.<br>● **TE.AC.2.D.i.2:** Organize the sequencing of the stages of a construction process.<br>● **TE.AC.2.D.i.4:** Explain how building codes vary based on geological, environmental, and political influences.<br>● **TE.AC.2.D.a.1:** Interpret and use construction blueprints and specifications to estimate materials. | |

| **Unit:** Alternative Energies for Homes | **Duration**: 4 days |
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| **Unit Objective (overarching objectives):**<br><br>● Describe how common residential renewable energy systems (solar, wind, geothermal, biomass, micro-hydro) operate.<br>● Compare the environmental and financial impacts of alternative energy sources versus conventional fossil fuels.<br>● Calculate approximate energy savings and payback periods for different renewable options using sample data.<br>● Identify available tax incentives, rebates, or grants that support residential renewable energy installations.<br>● Evaluate case studies and recommend the most appropriate renewable energy solution for a specific climate and budget.<br>● Design a basic conceptual plan showing how a renewable energy source could be integrated into a new or existing home. | |
| **Priority Standards:** | **Learning Targets:** |

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| ● **TE.AC.2.G:** Demonstrate the impact of financial, technical, environmental, political, societal, and labor trends of the past and the future of the construction industry. | ● I can describe how solar, wind, geothermal, biomass, and micro-hydro systems work in a house.<br>● I can compare the environmental impacts of renewable energy sources with traditional fossil fuels.<br>● I can estimate energy savings and payback time for different renewable options using sample data.<br>● I can identify tax credits, rebates, and grants that support home renewable energy projects.<br>● I can recommend the best renewable energy option for a specific climate and budget.<br>● I can design a simple plan to add a renewable energy system to a new or existing home. |
| **Supporting Standards:**<br><br>● **TE.AC.2.G.b.3:** Define and discuss the importance of energy efficiency.<br>● **TE.AC.2.G.b.3:** Define and discuss the importance of energy efficiency.<br>● **TE.AC.2.G.i.2:** Distinguish how construction can impact the environment both positively and negatively.<br>● **TE.AC.2.G.i.5:** Compare and contrast the advantages and disadvantages of green building systems and techniques, for example, U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED), Green Globes, or National Green Building Standard. | |

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| **Unit:** Floor Plan Design | **Duration**: 4 days |
| **Unit Objective (overarching objectives):**<br><br>● Read and interpret residential floor plans, including symbols, scale, and dimensions.<br>● Apply design principles—such as balance, proportion, and traffic flow—to create functional living spaces.<br>● Draft a scaled floor plan for a single-family home that meets given client needs and local building codes.<br>● Incorporate energy efficiency and universal design features into their floor plan.<br>● Use manual or digital drafting tools to produce a professional-quality plan. | |

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| ● Present and defend design choices, explaining how their layout meets aesthetic and practical requirements. | |
| **Priority Standards:**<br><br>● **TE.AC.2.C:** Apply measurement systems in the planning and layout process used in the construction industry. | **Learning Targets:**<br><br>● I can read and explain the symbols, scale, and dimensions on a residential floor plan.<br>● I can apply design principles—balance, proportion, and traffic flow—to create a functional layout.<br>● I can draw a scaled floor plan that meets client needs and basic building codes.<br>● I can include energy-efficient and universal design features in my floor plan.<br>● I can use graph paper or digital drafting tools to produce a professional-looking plan.<br>● I can present and justify my floor plan design choices to others. |
| **Supporting Standards:**<br><br>● **TE.AC.2.C.b.1:** Recognize and identify the rooms in a home.<br>● **TE.AC.2.C.b.2:** Demonstrate scale and proportion. For example, a toy car is a scale model of a full-sized car.<br>● **TE.AC.2.C.b.3:** Communicate ideas and plans through sketching or drawing.<br>● **TE.AC.2.D.a.1:** Interpret and use construction blueprints and specifications to estimate materials. | |

## Hot Metals I

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| **Unit 1:** Introduction to Welding & Careers in Manufacturing | **Duration:** 3 classes |

**Unit Objective:**

- Students will understand the role of welding in manufacturing and identify career opportunities.

| **Priority Standards:** | **Learning Targets ("I Can" Statements):** |
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| ● **TE.MFG.1.A**: Analyze the manufacturing industry. | ● I can describe the uses of welding in industry.<br>● I can identify different welding processes and their applications.<br>● I can explore career paths and required training in welding/manufacturing. |

**Supporting Standards:**

- **TE.MFG.1.A.b.1:** Identify careers in the manufacturing industry.
- **TE.MFG.1.A.i.2:** Research and identify industry-recognized certifications.

| **Unit 2:** Welding & Shop Safety | **Duration:** 4 classes |
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**Unit Objective:**

- Students will demonstrate safe practices in welding and shop operations.

| **Priority Standards:** | **Learning Targets ("I Can" Statements):** |
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| ● **TE.MFG.2.A:** Identify, select, and safely use tools, machines, and materials. | ● I can follow general shop and welding safety rules.<br>● I can use PPE correctly in welding environments.<br>● I can identify hazards in welding processes and apply safety protocols. |

**Supporting Standards:**

- **TE.MFG.2.A.b.1:** Discuss health and safety in the workplace.

- **TE.MFG.2.A.i.1:** Identify health and safety procedures.
- **TE.MFG.2.A.i.2:** Safely perform job-related tasks.

| **Unit 3:** Tools, Measurement, and Metallurgy | **Duration**: 3 classes |
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| **Unit Objective:**<br>● Students will develop skills in measurement, hand tool use, and basic metallurgy concepts. | |
| **Priority Standards:**<br>● **TE.MFG.2.A:** Identify, select, and safely use tools, machines, and materials. | **Learning Targets ("I Can" Statements):**<br>● I can measure and mark metal using customary and metric systems.<br>● I can identify and properly use hand tools in metalworking.<br>● I can explain basic classifications of metals and welding contamination. |
| **Supporting Standards:**<br>● **TE.MFG.2.A.b.2:** Recognize tools, machines, and materials.<br>● **TE.MFG.2.A.i.3:** Explore both customary and metric measurement systems.<br>● **TE.MFG.2.A.a.3:** Select and apply appropriate materials and processes. | |

| **Unit 4:** Welding Processes (Stick, MIG, Gas, Cutting) | **Duration**: 20 classes |
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| **Unit Objective:**<br>● Students will apply welding techniques using different processes to produce quality welds. | |
| **Priority Standards:** | **Learning Targets ("I Can" Statements):** |

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| • **TE.MFG.2.A:** Identify, select, and safely use tools, machines, and materials. | • I can set up and operate welding equipment (Stick, MIG, Oxy-Acetylene).<br>• I can apply proper welding techniques for different processes.<br>• I can evaluate my welds for accuracy, strength, and appearance. |
| **Supporting Standards:**<br><br>• **TE.MFG.2.A.i.2:** Safely perform job-related tasks.<br>• **TE.MFG.2.A.a.2:** Use appropriate tools, materials, and processes.<br>• **TE.MFG.2.B.i.2:** Practice appropriate problem-solving techniques. | |

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| **Unit 5:** Individual Fabrication Project | **Duration**: 15 classes |
| **Unit Objective:**<br><br>• Students fabricate an individual project applying welding skills and processes. | |
| **Priority Standards:**<br><br>• **TE.MFG.2.B:** Create and communicate advantageous solutions. | **Learning Targets ("I Can" Statements):**<br><br>• I can read and interpret blueprints to guide fabrication.<br>• I can plan and execute steps to complete a welding project.<br>• I can demonstrate precision and craftsmanship in my project. |
| **Supporting Standards:**<br><br>• **TE.MFG.2.B.b.3:** Identify the basics of communication processes.<br>• **TE.MFG.2.B.i.1:** Describe the benefits of design processes.<br>• **TE.MFG.2.B.a.2:** Apply methodical problem-solving to production challenges. | |

## Hot Metals II

| **Unit 1:** Shop and Welding Safety | **Duration:** 3 classes |
|---|---|
| **Unit Objective:**<br>● Students will demonstrate proper safety practices in welding and fabrication, including safe use of shop tools, cutting equipment, and protective gear. | |
| **Priority Standards:**<br>● **TE.MFG.2.A:** Identify, select, and safely use tools, equipment, machines, and materials in manufacturing. | **Learning Targets ("I Can" Statements):**<br>● I can demonstrate correct PPE use in welding and fabrication.<br>● I can perform safe setup and shutdown of shop machines.<br>● I can explain shop rules and hazard prevention. |
| **Supporting Standards:**<br>● **TE.MFG.2.C** (Respect & cooperation in teams)<br>● **TE.MFG.3.A** (Understand impact of manufacturing processes) | |

| **Unit 2:** Welding Processes and Quality | **Duration:** 15 classes |
|---|---|
| **Unit Objective:**<br>● Students will apply SMAW, GMAW, and GTAW processes to produce quality welds that meet evaluation criteria. | |
| **Priority Standards:**<br>● **TE.MFG.2.A:** Safely use tools, equipment, and machines in manufacturing. | **Learning Targets ("I Can" Statements):**<br>● I can set up and operate SMAW, MIG, and TIG equipment.<br>I can produce welds in different test positions. |

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| • **TE.MFG.3.B:** Apply technical skills to create and evaluate manufactured products. | • I can evaluate welds for quality using established criteria. |
| **Supporting Standards:**<br><br>• **TE.MFG.2.B** (Critical thinking and communication)<br>• **TE.MFG.4.A** (Use problem-solving strategies in manufacturing). | |

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| **Unit 3:** Blueprint Reading and Project Estimating | **Duration**: 4 classes |
| **Unit Objective:**<br><br>• Students will interpret welding blueprints and symbols to plan, estimate, and prepare a bill of materials for projects. | |
| **Priority Standards:**<br><br>• **TE.MFG.2.B:** Create and communicate advantageous solutions.<br><br>• **TE.MFG.3.C:** Interpret technical information to support production. | **Learning Targets ("I Can" Statements):**<br><br>• I can read and interpret welding symbols and drawings.<br>• I can calculate material needs and costs for a project.<br>• I can prepare a bill of materials. |
| **Supporting Standards:**<br><br>• **TE.MFG.4.B** (Apply math and science in problem solving)<br>• **TE.MFG.1.A** (Explore manufacturing careers). | |

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| **Unit 4:** Cutting Processes (Oxy-Fuel, Plasma, Air Carbon Arc) | **Duration**: 6 classes |
| **Unit Objective:** | |

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| ● Students will select, set up, and operate cutting equipment to perform precise cuts on plate, tube, and pipe materials. | |
| **Priority Standards:**<br><br>● **TE.MFG.2.A:** Safely use tools, equipment, and machines in manufacturing. | **Learning Targets ("I Can" Statements):**<br><br>● I can set up and adjust oxy-fuel cutting equipment.<br>● I can perform manual and CNC plasma and carbon-arc cutting for different applications.<br>● I can evaluate cut quality for accuracy and safety. |
| **Supporting Standards:**<br><br>● **TE.MFG.3.A** (Impact of processes)<br>● **TE.MFG.4.A** (Problem-solving in manufacturing). | |

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| **Unit 5:** Project Fabrication | **Duration**: 17 classes |
| **Unit Objective:**<br><br>● Students will apply welding, cutting, and fabrication skills to design and build an individual metal project. | |
| **Priority Standards:**<br><br>● **TE.MFG.3.B:** Apply technical skills to create and evaluate manufactured products.<br><br>● **TE.MFG.4.A:** Use problem-solving strategies to address design challenges. | **Learning Targets ("I Can" Statements):**<br><br>● I can design and plan a fabrication project.<br>● I can apply multiple welding and cutting processes in my project.<br>● I can evaluate my project for function, accuracy, and quality. |
| **Supporting Standards:** | |

- **TE.MFG.2.C** (Teamwork & cooperation)
- **TE.MFG.5.A** (Apply lean/efficient manufacturing practices)

## Intro to Tech Ed Curriculum Guide

| **Unit 1:** Introduction to Career and Technical Service Organizations<br>(CTSOs: SkillsUSA & FFA) | **Unit Duration:** 2 days |
|---|---|
| **Unit Objectives:**<br><br>● Compare and contrast SkillsUSA and FFA.<br>● Understand the purpose and benefits of CTSOs in career development.<br>● Explore leadership opportunities and competitions available through CTSOs. | |
| **Priority Standards:**<br><br>● **TE.BB.1.C:** Identify the benefits of participation in career and technical student organizations (CTSOs) and their impact on career readiness. | **Learning Targets:**<br><br>● I can identify key aspects of SkillsUSA and FFA.<br>● I can explain the role of CTSOs in professional development. |
| **Supporting Standards:**<br><br>● **TE.AC.2.G:** Demonstrate precision measurement techniques using industry-standard tools.<br>● **TE.BB.1.B:** Analyze the impact of societal, economic, and technological changes on employment and the workplace.<br>● **TE.AC.1.A:** Evaluate the role of professional organizations in the construction industry. | |

| **Unit 2:** Introduction to Tools - Hammer Use & Fasteners | **Unit Duration:** 2 days |
|---|---|

**Unit Objectives:**

- Demonstrate proper hammering techniques.
- Identify and use different types of nails and fasteners.

| **Priority Standards:** | **Learning Targets:** |
|---|---|
| ● **TE.AC.2.A:** Demonstrate the safe and appropriate use of all tools common to the construction industry. | ● I can hold and use a hammer safely.<br>● I can select appropriate fasteners for specific applications. |

**Supporting Standards:**

- **TE.AC.2.B:** Demonstrate proper maintenance procedures for tools and equipment.
- **TE.AC.2.C:** Apply measurement systems in the planning and layout process used in the construction industry.

| **Unit 3:** General Shop Safety Duration | **Unit Duration:** 3 days |
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**Unit Objectives:**

- Identify required PPE and safe behavior in the shop.
- Recognize potential hazards around machinery.

| **Priority Standards:** | **Learning Targets:** |
|---|---|
| ● **TE.AC.2.E:** Demonstrate the value and necessity of practicing occupational safety in the construction industry facility and on the job site. | ● I can list and wear appropriate PPE for tasks.<br>● I can follow general shop safety protocols.<br>● I can use hand and power tools safely. |

**Supporting Standards:**

- **TE.AC.2.A:** Demonstrate the safe and appropriate use of all tools common to the construction industry.
- **TE.AC.2.F:** Identify and implement emergency procedures and protocols in a

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| construction environment. |

| **Unit 4:** Transportation Technology | **Unit Duration:** 5 days |
|---|---|
| **Unit Objectives:**<br><br>● Read tire size, check tread depth, and change a tire.<br>● Locate and check vehicle fluids.<br>● Understand the purpose and use of a VIN. | |
| **Priority Standards:**<br><br>● **TE.EEC.7.D:** Assess battery charging, state of charge, and state of health. | **Learning Targets:**<br><br>● I can perform a tire pressure and tread depth check.<br>● I can locate vehicle fluids and interpret a VIN.<br>● I can interpret and explain tire dimensions (width, aspect ratio, rim size, etc). |
| **Supporting Standards:**<br><br>● **TE.EEC.7.C:** Demonstrate understanding of vehicle starting and charging systems.<br>● **TE.EEC.5.A:** Explain the principles of internal combustion engines. | |

| **Unit 5:** Visual Communications | **Unit Duration:** 9 days |
|---|---|
| **Unit Objectives:**<br><br>● Use Adobe Illustrator software to create and enhance graphic designs to effectively communicate a message.<br>● Learn to use laser engrave to etch designs on various media. | |
| **Priority Standards:** | **Learning Targets:** |

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| • **TE.BB.2.A:** Analyze and use technological systems. | • I can design and communicate a message effectively onto media like cork coasters, vinyl and buttons using industry tools like laser engravers, large format printers, 3D printers, and button presses. |
| **Supporting Standards:**<br><br>• **TE.BB.2.B:** Evaluate the effectiveness of technological products and systems.<br>• **TE.BB.2.C:** Demonstrate the use of design software in developing technological solutions. | |

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| **Unit 6:** Introduction to CAD Modeling (3D Modeling) | **Unit Duration:** 5 days |
| **Unit Objectives:**<br><br>• Understand the interface and basic tools in CAD Software.<br>• Create and modify simple 3D models. | |
| **Priority Standards:**<br><br>• **TE.BB.2.D:** Analyze and use electricity and electronic systems. | **Learning Targets:**<br><br>• I can develop basic 3D models in CAD software.<br>• I can navigate and apply essential CAD tools. |
| **Supporting Standards:**<br><br>• **TE.BB.2.E:** Apply principles of engineering design to develop solutions.<br>• **TE.BB.2.F:** Utilize simulation software to test and analyze designs. | |

| **Unit 7:** Residential House Wiring | **Unit Duration:** 5 days |
|---|---|
| **Unit Objectives:**<br><br>● Wire basic two-way switches, lamps, and receptacles.<br>● Understand circuit safety principles. | |
| **Priority Standards:**<br><br>● **TE.EEC.4.A:** Perform electrical and electronic fabrication and maintenance tasks. | **Learning Targets:**<br><br>● I can install and test residential wiring components.<br>● I can interpret basic electrical diagrams. |
| **Supporting Standards:**<br><br>● **TE.EEC.5.A:** Explain the principles of electrical circuits and wiring systems.<br>● **TE.EEC.6.A:** Apply troubleshooting techniques to diagnose and repair electrical faults. | |

| **Unit 8:** Manufacturing - Sheet Metal Fabrication | **Unit Duration:** 6 days |
|---|---|
| **Unit Objectives:**<br><br>● Interpret blueprints and measure accurately.<br>● Fabricate a sheet metal box using essential tools. | |
| **Priority Standards:**<br><br>● **TE.AC.2.C:** Apply measurement systems in the planning and layout process used in the construction industry. | **Learning Targets:**<br><br>● I can follow and blueprint and measure and mark materials accurately.<br>● I can use shears, brakes, and rivet guns effectively. |
| **Supporting Standards:**<br><br>● **TE.AC.2.D:** Apply geometric and trigonometric principles to layout processes.<br>● **TE.AC.2.F:** Identify and implement quality control procedures in manufacturing. | |

| **Unit 9:** House Layout & Construction Principles | **Unit Duration:** 4 days |
|---|---|
| **Unit Objectives:**<br><br>● Design a house layout considering square footage and room functionality.<br>● Apply construction principles in design planning. | |
| **Priority Standards:**<br><br>● **TE.AC.2.H:** Demonstrate architectural and design principles in the planning and idea phase used in architecture and construction. | **Learning Targets:**<br><br>● I can create a basic house layout plan.<br>● I can analyze effective use of space in residential design. |
| **Supporting Standards:**<br><br>● **TE.AC.1.A:** Evaluate the role of professional organizations in the construction industry.<br>● **TE.AC.2.B:** Utilize computer design software to develop architectural plans. | |

| **Unit 10:** Robotics Technology & Basic Coding | **Unit Duration:** 3 days |
|---|---|
| **Unit Objectives:**<br><br>● Understand basic programming logic.<br>● Apply coding skills to control robotic components. | |
| **Priority Standards:**<br><br>● **TE.EEC.9.A:** Describe the conversion of analog signals to digital, digital signal processing, gate, and embedded logic. | **Learning Targets:**<br><br>● I can write and troubleshoot basic code for robotics applications.<br>● I can operate robotic systems using programmed instructions. |
| **Supporting Standards:** | |

- **TE.EEC.7.A:** Demonstrate knowledge of robotic sensors and actuators.
- **TE.EEC.8.A:** Apply programming concepts to automate mechanical systems.

## Intro to Digital Photography and Photoshop

| **Unit 1:** Introduction to Photography & Photoshop Basics | **Duration:** 2 weeks |
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| **Unit Objectives**<br>● Students will learn camera basics, file organization, and Photoshop workspace navigation to prepare for future projects. | |
| **Priority Standards**<br>● **TE.ICT.2.B** – Demonstrate knowledge and skills by utilizing editing and creation software.<br>● **TE.ICT.2.C** – Analyze and use various technologies related to photographic media.<br>● **TE.ICT.2.B** (Use technology operations and concepts)<br>● **TE.ICT.2.D** (Demonstrate digital media skills) | **Learning Targets ("I Can" Statements):**<br>● I can adjust basic camera settings (ISO, aperture, shutter speed).<br>● I can navigate Photoshop's interface and manage files efficiently.<br>● Create, save, export files with correct formats/resolution.<br>● Use core Photoshop tools and panels. |
| **Supporting Standards:**<br>● **TE.ICT.2.A** – Analyze the communication process.<br>● **TE.ICT.2.A** (Demonstrate digital citizenship) | |

| **Unit 2:** Exposure, Composition, and Basic Editing | **Duration:** 3 weeks |
|---|---|
| **Unit Objective:**<br>● Students will apply the exposure triangle and composition techniques to capture and enhance images in Photoshop. | |
| **Priority Standards:**<br>● **TE.ICT.2.B** – Utilize editing software.<br>● **TE.ICT.2.C** – Analyze and use photographic technologies. | **Learning Targets ("I Can" Statements):**<br>● I can capture photos with correct exposure and strong composition.<br>● I can make basic Photoshop adjustments (crop, brightness, contrast, color balance). |
| **Supporting Standards:**<br>● **TE.ICT.2.D** – Apply elements and principles of design | |

| **Unit 3:** Depth of Field and Focus - Nature & Landscape Photography- Color & Adjustment Layers | **Duration**: 3 weeks |
|---|---|
| **Unit Objective:**<br>● Students will control depth of field and sharpen images for emphasis. Students will capture landscapes and natural subjects, learning HDR photography and color enhancement in Photoshop.Apply color corrections and adjustments to images. Explain use of different color modes and resolution.<br>Create visually appealing color-graded images. | |
| **Priority Standards:**<br>● **TE.ICT.2.C** – Analyze and use photographic technologies.<br>● **TE.ICT.2.B** – Utilize editing software. | **Learning Targets ("I Can" Statements):**<br>● I can use aperture to control depth of field.<br>● I can enhance focus using Photoshop sharpening tools. |

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| | ● I can compose landscapes with depth and interest.<br>● I can use natural light effectively at different times of day.<br>● I can enhance colors and details in Photoshop.<br>● Use adjustment layers (levels, curves, hue/saturation).<br>● Understand RGB vs CMYK and resolution settings. |
| **Supporting Standards:**<br><br>● **TE.ICT.2.A** – Understand purposes of visual communication.<br>● **TE.ICT.2.E** – Prepare photos for digital or printed display. | |

| **Unit 4:** Action and Motion Photography / Retouching & Restoration | **Duration**: **Weeks** 3 weeks |
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| **Unit Objective:**<br><br>● Students will capture movement using different shutter speeds and edit to emphasize motion. | |
| **Priority Standards:**<br><br>● **TE.ICT.2.B** – Utilize editing software.<br><br>● **TE.ICT.2.C** – Analyze and use photographic technologies.<br><br>● **TE.ICT.2.D** (Digital media skills)<br><br>● **TE.ICT.2.C** (Critical thinking and problem solving) | **Learning Targets ("I Can" Statements):**<br><br>● I can choose appropriate shutter speeds for different motion effects.<br>● I can apply Photoshop tools to enhance action shots.<br>● Use Character/Paragraph panels effectively.<br>● Create text paths and clipping masks. |
| **Supporting Standards:**<br><br>● **TE.ICT.2.A** – Understand purposes of visual communication. | |

| **Unit 5:** Lighting Techniques | **Duration:** 3 weeks |
|---|---|
| **Unit Objective:**<br>● Students will use natural and artificial lighting to improve image quality and apply targeted Photoshop enhancements. | |
| **Priority Standards:**<br>● **TE.ICT.2.B** – Utilize editing software.<br>● **TE.ICT.2.C** – Analyze and use photographic technologies. | **Learning Targets:**<br>● I can control lighting for desired visual effects.<br>● I can enhance lighting and shadows in Photoshop |
| **Supporting Standards:**<br>● **TE.ICT.2.A** – Understand purposes of visual communication. | |

| **Unit 1:** Black & White Photography / Retouching & Restoration | **Duration:** 3 weeks |
|---|---|
| **Unit Objectives**<br>● Students will compose and edit images for strong black-and-white impact. Use Photoshop tools to repair and retouch images.<br>Apply generative AI tools for retouching where appropriate.<br>Restore damaged or low-quality images. | |
| **Priority Standards**<br>● **TTE.ICT.2.B** – Utilize editing software.<br>● **TE.ICT.2.C** – Analyze and use photographic technologies. | **Learning Targets ("I Can" Statements):**<br>● I can capture images that translate well into black and white.<br>● I can convert and adjust photos in Photoshop for tonal range. |
| **Supporting Standards:** | |

- **TE.ICT.2.D** (Digital media skills)
- **TE.ICT.2.C** (Critical thinking and problem solving)

## Machine Shop I

| **Unit 1:** Safety & Shop Practices | **Duration:** 6 classes |
|---|---|
| **Unit Objective:**<br>● Students will demonstrate safe and responsible practices when working in a machine shop environment. | |
| **Priority Standards:**<br>● **TE.MFG.2.A:** Identify, select, and safely use tools, machines, and processes in manufacturing. | **Learning Targets ("I Can" Statements):**<br>● I can identify shop safety rules and personal protective equipment.<br>● I can demonstrate safe operation of basic shop machines (lathe, mill, drill press, grinder).<br>● I can pass written and performance-based safety tests. |
| **Supporting Standards:**<br>● **TE.MFG.2.C**: Demonstrate respect and cooperation with others in a manufacturing setting.<br>● **TE.MFG.1.A:** Analyze the manufacturing industry (introductory career awareness). | |

| **Unit 2:** Measurement & Precision Tools | **Duration:** 6 classes |
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| **Unit Objective:** | |

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| ● Students will apply precision measurement techniques to ensure accuracy in metalworking projects. | |
| **Priority Standards:**<br><br>● **TE.MFG.2.A:** Identify, select, and safely use tools, machines, and processes in manufacturing. | **Learning Targets ("I Can" Statements):**<br><br>● I can measure accurately using a steel rule, micrometer, and caliper.<br>● I can compare customary and metric measurement systems. |
| **Supporting Standards:**<br><br>● **TE.MFG.2.B:** Create and communicate advantageous solutions using critical thinking.<br>● **TE.MFG.4.A:** Apply quality assurance and measurement practices in manufacturing. | |

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| **Unit 3:** Hand Tools & Material Preparation | **Duration**: 10 classes |
| **Unit Objective:**<br><br>● Students will use hand tools to layout, cut, shape, and prepare metal for machining processes. | |
| **Priority Standards:**<br><br>● **TE.MFG.2.A:** Identify, select, and safely use tools, machines, and processes in manufacturing. | **Learning Targets ("I Can" Statements):**<br><br>● I can correctly use layout tools for metalworking.<br>● I can cut, file, and shape metal using hand tools.<br>● I can use taps and dies to create internal and external threads. |
| **Supporting Standards:**<br><br>● **TE.MFG.3.A:** Understand properties of materials used in manufacturing.<br>● **TE.MFG.5.A:** Apply processes to produce a product from raw materials. | |

| **Unit 4:** Machine Tools & Operations | **Duration**: 15 classes |
|---|---|
| **Unit Objective:**<br><br>● Students will safely set up and operate machine tools to manufacture precision parts.<br>● | |
| **Priority Standards:**<br><br>● **TE.MFG.2.A:** Identify, select, and safely use tools, machines, and processes in manufacturing. | **Learning Targets ("I Can" Statements):**<br><br>● I can safely set up and operate the lathe, vertical mill, drill press, grinder, and foundry equipment.<br>● I can explain the function and applications of each machine.<br>● I can produce a part to specifications using machine tools. |
| **Supporting Standards:**<br><br>● **TE.MFG.5.A:** Apply processes to produce a product from raw materials.<br>● **TE.MFG.4.A:** Apply quality control techniques in manufacturing.<br>● **TE.MFG.1.A:** Explore careers related to machining and metalworking. | |

| **Unit 5:** Introduction to CNC Machining | **Duration**: 8 classes |
|---|---|
| **Unit Objective:**<br><br>● Students will be introduced to CNC milling machines and apply basic programming to produce a project. | |
| **Priority Standards:**<br><br>● **TE.MFG.2.A:** Identify, select, and safely use tools, machines, and processes in manufacturing.<br><br>● **TE.MFG.2.B:** Create and communicate advantageous solutions using critical thinking. | **Learning Targets ("I Can" Statements):**<br><br>● I can explain the difference between manual and CNC machining.<br>● I can use G-code and CAM software to create a CNC program.<br>● I can manufacture a CNC nameplate project following a process plan. |

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| **Supporting Standards:**<br><br>● **TE.MFG.5.A:** Apply processes to produce a product from raw materials.<br>● **TE.MFG.4.A:** Apply quality assurance practices to CNC parts. |

## Machine Shop II

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| **Unit 1:** Safety & Measurement in the Machine Shop | **Duration:** 4 classes |
| **Unit Objective:**<br><br>● Students will apply industry-standard safety practices and use precision measurement tools to ensure accuracy in machining tasks. | |
| **Priority Standards:**<br><br>● **TE.MFG.2.A** – Identify, select, and safely use tools, equipment, machines, and materials in manufacturing.<br><br>● **TE.MFG.2.B** – Create and communicate advantageous solutions to manufacturing challenges. | **Learning Targets ("I Can" Statements):**<br><br>● I can identify and follow machine shop safety procedures.<br>● I can properly use precision measuring tools such as micrometers, dial calipers, and steel rules.<br>● I can explain the importance of accuracy in machining. |
| **Supporting Standards:**<br><br>● **TE.MFG.2.A.i.1:** Identify health and safety procedures.<br>● **TE.MFG.2.A.i.2:** Safely perform job-related tasks.<br>● **TE.MFG.2.A.a.2:** Use appropriate tools, materials, machines, and equipment safely. | |

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| **Unit 2:** Machine Operations – Lathe, Mill, | **Duration:** 15 classes |

| Drill, and Grinder | |
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| **Unit Objective:**<br>● Students will operate traditional machining equipment to produce accurate, quality parts. | |
| **Priority Standards:**<br>● **TE.MFG.2.A** – Identify, select, and safely use tools, equipment, machines, and materials in manufacturing.<br>● **TE.MFG.3.A** – Apply technical knowledge and skills related to production processes. | **Learning Targets ("I Can" Statements):**<br>● I can set up and operate a lathe, mill, drill press, and grinder according to industry standards.<br>● I can produce precision cuts and finishes using machining equipment.<br>● I can demonstrate correct material handling procedures. |
| **Supporting Standards:**<br>● **TE.MFG.2.A.i.2:** Safely perform job-related tasks.<br>● **TE.MFG.3.A.i.2:** Apply technical knowledge to transform materials into finished products.<br>● **TE.MFG.2.A.a.3:** Select and apply appropriate measurement systems. | |

| **Unit 3:** Metallurgy & Finishing Techniques | **Duration**: 5 classes |
|---|---|
| **Unit Objective:**<br>● Students will analyze metal properties and apply finishing processes to improve part performance and appearance. | |
| **Priority Standards:**<br>● **TE.MFG.3.A** – Apply technical knowledge and skills related to production processes.<br>● **TE.MFG.4.A** – Apply knowledge of | **Learning Targets ("I Can" Statements):**<br>● I can classify metals and describe their characteristics.<br>● I can apply heat treatment to alter material properties.<br>● I can finish parts using coatings, |

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| material properties and processes in manufacturing. | polishing, and other surface treatments. |
| **Supporting Standards:**<br><br>● **TE.MFG.4.A.i.1**: Identify material properties and their uses in manufacturing.<br>● **TE.MFG.3.A.a.1:** Apply advanced manufacturing processes.<br>● **TE.MFG.4.A.a.2:** Select materials based on performance requirements. | |

| **Unit 4:** CNC Machining & Precision Projects | **Duration**: 21 classes |
|---|---|
| **Unit Objective:**<br><br>● Students will program and operate CNC equipment to produce precision components. | |
| **Priority Standards:**<br><br>● **TE.MFG.3.A** – Apply technical knowledge and skills related to production processes.<br><br>● **TE.MFG.2.B** – Create and communicate advantageous solutions to manufacturing challenges. | **Learning Targets ("I Can" Statements):**<br><br>● I can create and run CNC programs for assigned projects.<br>● I can produce a CNC-machined part to specification (e.g., nameplate).<br>● I can compare CNC and traditional machining processes. |
| **Supporting Standards:**<br><br>● **TE.MFG.2.B.a.2:** Apply methodical problem-solving to improve manufacturing processes.<br>● **TE.MFG.3.A.a.2:** Apply technical knowledge to advanced manufacturing systems.<br>● **TE.MFG.2.B.i.2:** Practice appropriate problem-solving strategies in manufacturing. | |

# Robotics 1 Curriculum Guide

| **Unit 1:** Defining Robotics & Introduction to Automation | **Unit Duration:** 4 Days |
|---|---|
| **Unit Objectives:**<br><br>● Define robotics and explain its applications in society.<br>● Identify different types of robots and their uses in automation and industry.<br>● Demonstrate knowledge of safety protocols in the robotics lab.<br>● Explore career opportunities in robotics and automation. | |
| **Priority Standards:**<br><br>● **WI.TE.C.12.1**: Implement and evaluate strategies to solve technological problems that are likely to be successful.<br><br>● **WI.TE.C.12.9**: Apply basic engineering concepts in the design and creation of solutions to various problems or opportunities. | **Learning Targets:**<br><br>● I can explain what robotics is and how it applies to various industries.<br>● I can identify different types of robots and their functions in automation.<br>● I can adhere to safety protocols within the robotics lab environment.<br>● I can explore and discuss various career paths in robotics and automation. |
| **Supporting Standards:**<br><br>● **WI.TE.D.12.1**: Describe how technological development has been evolutionary, often the result of a series of refinements to basic inventions or technological knowledge.<br>● **WI.TE.D.12.6**: Analyze the relationships between technology and society, including the effects of technology on the environment. | |

| **Unit 2:** Simple Machines & Mechanical Systems | **Unit Duration:** 3 Days |
|---|---|
| **Unit Objectives:**<br><br>● Identify and classify the six types of simple machines.<br>● Understand the role of simple machines in robotic systems. | |

- Calculate mechanical advantage in robotic designs.
- Design a simple robotic mechanism using VEX Robotics kits.

| **Priority Standards:** | **Learning Targets:** |
|---|---|
| ● **WI.TE.C.12.4**: Select materials and other resources for a technological design and develop practical solutions.<br>● **WI.TE.C.12.5**: Identify constraints present in a given technological process. | ● I can identify and describe the six types of simple machines.<br>● I can explain how simple machines function within robotic systems.<br>● I can calculate mechanical advantage to optimize robotic designs.<br>● I can design and construct a robotic mechanism using VEX Robotics kits. |

**Supporting Standards:**

- **WI.TE.C.12.6**: Design and/or create solutions that are functional, aesthetically pleasing, demonstrate quality, have value greater than the investment, and meet a societal want or need.
- **WI.TE.C.12.11**: Select and apply appropriate processes to alter the characteristics of material to make it useful in different situations.

| **Unit 3:** Introduction to Programming – Pseudocode & JavaScript | **Unit Duration:** 3 Days |
|---|---|

**Unit Objectives:**

- Understand and write pseudocode as a planning tool.
- Learn basic JavaScript syntax for robot programming.
- Apply Boolean logic (AND, OR, NOT) in decision-making algorithms.
- Write, debug, and execute JavaScript programs in VEXCode & VexVR.

| **Priority Standards:** | **Learning Targets:** |
|---|---|
| ● **WI.ITEEA.CT1.a.3.m**: Define and solve an authentic problem using data analysis, modeling, and algorithmic thinking. | ● I can write pseudocode to plan robotic functions.<br>● I can use JavaScript syntax to program a basic robotic task. |

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| | ● I can apply Boolean logic to make robots respond to conditions.<br>● I can debug and test JavaScript code in a robotics environment. |
| **Supporting Standards:**<br><br>● **WI.ITEEA.CT2.a.2.h**: Design a computational artifact that demonstrates a solution to a problem. | |

| **Unit 4:** Understanding & Utilizing Gear Ratios | **Unit Duration:** 4 Days |
|---|---|
| **Unit Objectives:**<br><br>● Define gear ratios and their impact on speed and torque.<br>● Identify different types of gears (spur, bevel, worm, rack & pinion, etc).<br>● Calculate and implement gear ratios for robot performance optimization.<br>● Modify VEX robots using different gear configurations. | |
| **Priority Standards:**<br><br>● **WI.TE.C.12.9**: Apply basic engineering concepts in the design and creation of solutions to various problems or opportunities.<br><br>● **WI.TE.C.12.10**: Evaluate a technological solution and make necessary improvements if needed. | **Learning Targets:**<br><br>● I can explain how gear ratios affect torque and speed in a robotic system.<br>● I can calculate and apply gear ratios to achieve specific mechanical advantages.<br>● I can modify a VEX robot using different gear configurations for optimization.<br>● I can analyze and test the performance of gear-driven robotic designs. |
| **Supporting Standards:**<br><br>● **WI.TE.C.12.3**: Defend solutions to technological problems and opportunities. | |

| **Unit 5:** Sensors & Switches for Robotic Control | **Unit Duration:** 6 Days |
|---|---|
| **Unit Objectives:**<br><br>● Understand how **bump switches, limit switches, and line sensors** work.<br>● Use **sensors to provide input** for robotic decision-making.<br>● Program **VEX robots** to respond to **sensor data**.<br>● Test and troubleshoot sensor-based robotics projects. | |
| **Priority Standards:**<br><br>● **SCI.ETS1.B.6-8**: Develop a model to generate data for iterative testing and modification of a proposed object, tool, or process. | **Learning Targets:**<br><br>● I can identify and describe the functions of bump switches, limit switches, and line sensors.<br>● I can explain how sensors allow robots to interact with their environment.<br>● I can program a VEX robot to respond to sensor inputs using conditional logic.<br>● I can troubleshoot and refine a robotic system that utilizes sensors for autonomous navigation. |
| **Supporting Standards:**<br><br>● **CT1.b.3.i**: Implement and refine algorithms to improve efficiency and functionality.<br>● **CT2.c.2.i**: Test and debug programs systematically to identify and fix errors in logic and function. | |

| **Unit 6:** Building & Programming with Sensors and Switches | **Unit Duration:** 6 Days |
|---|---|
| **Unit Objectives:**<br><br>● Learn the functions of **bump switches, limit switches, line sensors, potentiometers, and shaft encoders**.<br>● Understand **digital vs. analog sensors** in robotic systems. | |

- Write **JavaScript programs** to integrate and control sensors in VEX Robotics.
- Apply **conditional logic** to allow robots to respond to environmental changes.

| **Priority Standards:** | **Learning Targets:** |
|---|---|
| ● **WI.TE.C.12.5**: Identify constraints present in a given technological process.<br>● **WI.ITEEA.CT3.a.1.m**: Use sensors to collect and analyze data to solve computational problems. | ● I can identify and explain the purpose of different sensors and switches in robotic systems.<br>● I can program a VEX robot to respond to sensor inputs.<br>● I can use **Boolean logic** and conditional statements to control robotic movement.<br>● I can troubleshoot and refine programs based on sensor feedback. |

**Supporting Standards:**

- **WI.TE.C.12.10**: Evaluate a technological solution and make necessary improvements if needed.

| **Unit 7:** Motors &  Actuators in Robotics | **Unit Duration:** 3 Days |
|---|---|

**Unit Objectives:**

- Learn how **393 motors and servo motors** function within robotic systems.
- Understand motor **torque, speed, and power consumption**.
- Program VEX robots to **control motor movement** and integrate with other components.
- Test and troubleshoot motor performance under different **gear ratios and loads**.

| **Priority Standards:** | **Learning Targets:** |
|---|---|
| ● **WI.TE.C.12.7**: Present a design solution that accounts for the production and operation of a device. | ● I can identify the difference between **DC motors, servo motors, and stepper motors**.<br>● I can calculate **torque and speed** to optimize motor performance. |

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| | ● I can program a **393 motor** to move in response to sensor input.<br>● I can analyze **power consumption** and efficiency in a robotic system. |
| **Supporting Standards:**<br><br>● **WI.TE.C.12.3**: Defend solutions to technological problems and opportunities. | |

| **Unit 8:** Autonomous Robotics & Obstacle Course Navigation | **Unit Duration:** 5 Days |
|---|---|
| **Unit Objectives:**<br><br>● Utilize **VEX Clawbot** to interact with objects in a structured environment.<br>● Implement **autonomous navigation** using sensors and decision-making logic.<br>● Use **VEX VR & Roboguide** to simulate obstacle avoidance.<br>● Troubleshoot and optimize robotic navigation algorithms. | |
| **Priority Standards:**<br><br>● **WI.ITEEA.CT2.a.3.h**: Implement an autonomous system that performs a task independently. | **Learning Targets:**<br><br>● I can program a **VEX Clawbot** to manipulate objects autonomously.<br>● I can use **sensors (line, bump, ultrasonic) to navigate an obstacle course**.<br>● I can analyze and optimize robot navigation using **Roboguide simulations**.<br>● I can debug and improve **autonomous movement algorithms**. |
| **Supporting Standards:**<br><br>● **WI.TE.C.12.6**: Design and/or create solutions that meet a societal need.<br>● **WI.TE.C.12.9**: Apply engineering concepts to solve real-world automation problems. | |

| **Unit 9:** Robotics in Industrial Automation with Fanuc Robotics | **Unit Duration**: 8 Days |
|---|---|
| **Unit Objectives:**<br><br>● Explore **Fanuc robotic arms** and their use in industrial automation.<br>● Program a **robotic arm in Roboguide** to perform simple pick-and-place operations.<br>● Understand how **robotics is integrated into manufacturing and logistics**.<br>● Analyze **efficiency, precision, and accuracy** in robotic automation. | |
| **Priority Standards:**<br><br>● **WI.ITEEA.CT3.a.2.h**: Program industrial robots to perform automated tasks. | **Learning Targets:**<br><br>● I can explain how **Fanuc robots** are used in industrial applications.<br>● I can program a **Fanuc robotic arm and utilizing Roboguide** to complete a simple task.<br>● I can analyze how **robotic automation increases efficiency** in production.<br>● I can identify **career opportunities in industrial robotics**. |
| **Supporting Standards:**<br><br>● **WI.TE.D.12.2**: Evaluate the impact of technology on the workforce and economy.<br>● **WI.TE.C.12.8**: Explain how automation reduces human labor in industrial settings. | |

| **Unit 10:** Robotics Competitions & Capstone Project | **Unit Duration:** 4 Days |
|---|---|
| **Unit Objectives:**<br><br>● Design, build, and program a **VEX robot** to compete in a class competition.<br>● Apply knowledge of **gears, sensors, programming, and motors** to create a functional robot.<br>● Document and present the **engineering design process** used in development.<br>● Work collaboratively to refine and improve robotic performance. | |

| **Priority Standards:** | **Learning Targets:** |
|---|---|
| ● **WI.TE.C.12.10**: Evaluate and refine technological solutions based on testing and feedback. | ● I can design and build a competitive VEX robot using **engineering principles**.<br>● I can apply **programming and mechanical knowledge** to optimize robot performance.<br>● I can document my design process and reflect on **areas of improvement**.<br>● I can work effectively in a **team-based engineering project**. |
| **Supporting Standards:**<br>● **WI.ITEEA.CT4.a.1.h**: Develop and present a computational artifact that integrates multiple systems.<br>● **WI.TE.D.12.4**: Evaluate the social and environmental impacts of technological advancements. | |

## Robotics 2: Advanced Robotics Curriculum Guide

| **Unit 1:** Industrial Robotics & Automation Fundamentals | **Unit Duration:** 5 Days |
|---|---|
| **Unit Objectives:**<br>● Explain the role of industrial robotics in manufacturing and automation.<br>● Identify the key components of Fanuc robotic systems.<br>● Understand safety protocols and best practices for working with industrial robots.<br>● Explore career pathways in industrial robotics and automation. | |
| **Priority Standards:**<br>● **WI.TE.C.12.1**: Implement and evaluate strategies to solve technological problems that are likely to be successful. | **Learning Targets:**<br>● I can describe the role of robotics in modern industrial automation.<br>● I can identify the components of a Fanuc robotic system. |

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| • **WI.TE.C.12.9**: Apply basic engineering concepts in the design and creation of solutions to various problems or opportunities. | • I can follow industry safety protocols when working with industrial robots.<br>• I can explore various career paths in industrial robotics and automation. |
| **Supporting Standards:**<br>• **WI.TE.D.12.2**: Evaluate the impact of technology on the workforce and economy. | |

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|---|---|
| **Unit 2:** Fanuc Roboguide Introduction & Simulation Basics | **Unit Duration:** 6 Days |
| **Unit Objectives:**<br>• Set up and navigate the Fanuc Roboguide software.<br>• Create and manipulate robotic workcells in a simulated environment.<br>• Understand the coordinate systems used in industrial robotics.<br>• Develop basic robotic programs using Roboguide. | |
| **Priority Standards:**<br>• **WI.ITEEA.CT1.a.3.h**: Define and solve an authentic problem using data analysis, modeling, and algorithmic thinking. | **Learning Targets:**<br>• I can set up and navigate the Fanuc Roboguide simulation software.<br>• I can create a robotic workcell and manipulate robot positions in Roboguide.<br>• I can explain the coordinate systems used in industrial robotics.<br>• I can write and execute basic robotic programs in Roboguide. |
| **Supporting Standards:**<br>• **WI.TE.C.12.5**: Identify constraints present in a given technological process.<br>• **WI.ITEEA.CT2.a.2.h**: Design a computational artifact that demonstrates a solution to a problem. | |

| **Unit 3:** Programming Fanuc Robots with Teach Pendants | **Unit Duration:** 6 Days |
|---|---|
| **Unit Objectives:**<br><br>● Learn the functions of Fanuc teach pendants.<br>● Write, modify, and execute robotic motion programs.<br>● Implement positional data for precise robot movement.<br>● Use variables and conditional logic in Fanuc programming. | |
| **Priority Standards:**<br><br>● **WI.ITEEA.CT3.a.2.h**: Program industrial robots to perform automated tasks. | **Learning Targets:**<br><br>● I can use the Fanuc teach pendant to program robot motion.<br>● I can modify and execute programs for precision movements.<br>● I can use variables and conditional statements in Fanuc robotic programming.<br>● I can troubleshoot and debug robotic programs. |
| **Supporting Standards:**<br><br>● **WI.TE.C.12.10**: Evaluate a technological solution and make necessary improvements if needed.<br>● **WI.ITEEA.CT2.c.2.i**: Test and debug programs systematically to identify and fix errors in logic and function. | |

| **Unit 4:** Robotic Path Planning & Motion Control | **Unit Duration:** 6 Days |
|---|---|
| **Unit Objectives:**<br><br>● Understand different types of robotic motion (joint, linear, circular).<br>● Plan and program complex motion paths in Roboguide.<br>● Optimize robot speed, acceleration, and deceleration settings. | |

- Implement obstacle avoidance in robotic movements.

| **Priority Standards:** | **Learning Targets:** |
|---|---|
| ● **WI.ITEEA.CT2.a.3.h**: Implement an autonomous system that performs a task independently. | ● I can define and program different types of robotic motion.<br>● I can plan and execute complex robotic paths in Roboguide.<br>● I can optimize robotic speed and acceleration for efficiency.<br>● I can integrate obstacle avoidance techniques into robot programming. |

**Supporting Standards:**

- **WI.TE.C.12.6**: Design and/or create solutions that are functional, aesthetically pleasing, and meet a societal want or need.
- **WI.TE.C.12.9**: Apply engineering concepts to solve real-world automation problems.

| **Unit 5:** Industrial Sensors & Robotic Vision Systems | **Unit Duration:** 5 Days |
|---|---|

**Unit Objectives:**

- Identify and integrate industrial sensors (proximity, force, vision).
- Program robots to interact with sensor data.
- Troubleshoot sensor-based robotic operations.

| **Priority Standards:** | **Learning Targets:** |
|---|---|
| ● **WI.ITEEA.CT3.a.1.m**: Use sensors to collect and analyze data to solve computational problems. | ● I can integrate industrial sensors into robotic systems.<br>● I can program robots to respond to sensor input.<br>● I can troubleshoot and optimize sensor-based robotic operations. |

**Supporting Standards:**

- **WI.TE.C.12.10**: Evaluate and refine technological solutions based on testing and feedback.

| **Unit 6:** Advanced Fanuc Robotic Programming | **Unit Duration:** 6 Days |
|---|---|
| **Unit Objectives:**<br><br>● Develop advanced motion sequences with logic control.<br>● Implement loops and decision-making algorithms in Fanuc programming.<br>● Utilize multi-robot coordination techniques.<br>● Optimize robotic efficiency for industrial applications. | |
| **Priority Standards:**<br><br>● **WI.ITEEA.CT4.a.1.h**: Develop and present a computational artifact that integrates multiple systems. | **Learning Targets:**<br><br>● I can write advanced robotic programs using loops and logic control.<br>● I can coordinate multi-robot operations in Roboguide.<br>● I can analyze and optimize robotic efficiency in industrial applications. |
| **Supporting Standards:**<br><br>● **WI.TE.C.12.8**: Explain how automation reduces human labor in industrial settings. | |

| **Unit 7:** Robotic Workcell Automation & Integration | **Unit Duration:** 6 Days |
|---|---|
| **Unit Objectives:**<br><br>● Design a fully automated robotic workcell in Roboguide.<br>● Integrate conveyor systems and external devices.<br>● Implement error handling and recovery strategies. | |

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- Simulate and test workcell performance.

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**Priority Standards:**

- **WI.ITEEA.CT3.a.2.h**: Program industrial robots to perform automated tasks.

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**Learning Targets:**

- I can design an automated robotic workcell.
- I can integrate external devices into a robotic system.
- I can program error handling and system recovery methods.
- I can simulate and optimize robotic workcell performance.

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**Supporting Standards:**

- **WI.TE.C.12.7**: Present a design solution that accounts for the production and operation of a device.

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**Unit 8:** Capstone Project & Industry Applications

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**Unit Duration:** 6 Days

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**Unit Objectives:**

- Design, program, and optimize an industrial robotic system.
- Apply Fanuc robotic concepts in a real-world project.
- Present a final project demonstrating robotic automation.
- Explore industry certifications and career pathways.

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**Priority Standards:**

- **WI.TE.C.12.10**: Evaluate and refine technological solutions based on testing and feedback.

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**Learning Targets:**

- I can design and program a fully functional robotic system.
- I can apply advanced automation techniques to an industry-based project.
- I can present my project to an audience and justify design decisions.
- I can explore career certifications and pathways in industrial robotics.

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| **Supporting Standards:**<br><br>● **WI.ITEEA.CT4.a.1.h**: Develop and present a computational artifact that integrates multiple systems. |

## Woods I

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|---|---|
| **Unit 1:** Introduction to Woodworking and Career Exploration | **Duration:** 5 days |
| **Unit Objective:**<br><br>Students will explore woodworking careers, understand industry terminology, and identify common materials and measurement tools. | |
| **Priority Standards:**<br><br>● **TE.MFG.2.A** – Identify, select, and safely use tools, machines, products, and systems for specific tasks.<br><br>● **TE.MFG.2.B** – Create and communicate advantageous business solutions related to manufacturing.<br><br>● **TE.MFG.2.C** – Demonstrate respect and cooperation for individual and cultural differences in the attitudes and feelings of others.<br><br>● **TE.MFG.2.F** – Select and understand manufacturing technologies. | **Learning Targets ("I Can" Statements):**<br><br>● I can identify and explain different career opportunities in woodworking and manufacturing.<br>● I can safely identify and use hand and power tools for woodworking tasks.<br>● I can work respectfully and cooperatively with others on projects.<br>● I can describe how woodworking skills can be applied to solve business or production problems.<br>● I can recognize different technologies used in the woodworking and manufacturing process. |
| **Supporting Standards:**<br><br>● **TE.MFG.2.E** – Select, use, and identify manufacturing systems.<br>● **TE.MFG.2.H** – Analyze and use various materials and manufacturing cutting operations. | |

| **Unit 2:** Measurement, Safety, and Tool Operation | **Duration:** 10 days |
|---|---|
| **Unit Objective:**<br><br>Students will develop safe working habits, identify and operate tools, and accurately measure materials for woodworking projects. | |
| **Priority Standards:**<br><br>● **TE.MFG.2.A** – Identify, select, and safely use tools, machines, products, and systems for specific tasks.<br><br>● **TE.MFG.2.D** – Select, use, and identify manufacturing processes, such as casting, forming, machining, joining, computer-controlled manufacturing (CNC), and treating/coating.<br><br>● **TE.MFG.2.F** – Select and understand manufacturing technologies.<br><br>● **TE.MFG.2.H** – Analyze and use various materials and manufacturing cutting operations. | **Learning Targets ("I Can" Statements):**<br><br>● I can accurately read measuring tools and transfer dimensions to materials.<br>● I can plan project layouts and use correct procedures for marking and cutting wood.<br>I can describe how cutting, joining, and shaping apply to woodworking projects.<br>● I can estimate material needs and project costs based on measurements.<br>● I can create a project plan that includes tools, steps, and safety considerations. |
| **Supporting Standards:**<br><br>● **TE.MFG.2.B** – Create and communicate advantageous business solutions related to manufacturing.<br>● **TE.MFG.2.E** – Select, use, and identify manufacturing systems. | |

| **Unit 3:** Tools, Materials, and Project Construction | **Duration**: 20 days |
|---|---|
| **Unit Objective:** | |

Students will interpret technical drawings, plan construction processes, and apply joinery and material preparation techniques.

| **Priority Standards:** | **Learning Targets ("I Can" Statements):** |
|---|---|
| ● **TE.MFG.2.A** – Identify, select, and safely use tools, machines, products, and systems for specific tasks.<br>● **TE.MFG.2.D** – Select, use, and identify manufacturing processes, such as casting, forming, machining, joining, computer-controlled manufacturing (CNC), and treating/coating.<br>● **TE.MFG.2.F** – Select and understand manufacturing technologies.<br>● **TE.MFG.2.H** – Analyze and use various materials and manufacturing cutting operations. | ● I can identify common woodworking tools and machines and describe their safe use.<br>● I can explain how to use tools like saws, drills, and sanders for specific operations.<br>● I can construct a project using appropriate processes such as joining and machining.<br>● I can choose suitable materials for a woodworking project based on their properties.<br>● I can demonstrate how to complete basic operations like ripping, crosscutting, and shaping. |

**Supporting Standards:**

● **TE.MFG.2.C** – Demonstrate respect and cooperation for individual and cultural differences in the attitudes and feelings of others.
**TE.MFG.2.E** – Select, use, and identify manufacturing systems.

| **Unit 4:** Finishing and Project Presentation | **Duration**: 10 days |
|---|---|

**Unit Objective:**

Students will prepare and finish wood surfaces and apply calculations to estimate material costs for woodworking projects.

| **Priority Standards:** | **Learning Targets ("I Can" Statements):** |
|---|---|
| ● **TE.MFG.2.A** – Identify, select, and | ● I can describe different wood types |

| | |
|---|---|
| safely use tools, machines, products, and systems for specific tasks.<br><br>● **TE.MFG.2.B** – Create and communicate advantageous business solutions related to manufacturing.<br><br>● **TE.MFG.2.D** – Select, use, and identify manufacturing processes, such as casting, forming, machining, joining, computer-controlled manufacturing (CNC), and treating/coating.<br><br>● **TE.MFG.2.F** – Select and understand manufacturing technologies. | and explain their uses in woodworking.<br>I can prepare a wood surface for finishing using sanding tools and techniques.<br>● I can apply stains, sealers, or paint to improve the look and durability of wood.<br>● I can assess my finished product using quality checks and improve as needed.<br>● I can explain my project choices, tools used, and outcomes to others. |
| **Supporting Standards:**<br><br>● **TE.MFG.2.C** – Demonstrate respect and cooperation for individual and cultural differences in the attitudes and feelings of others.<br>● **TE.MFG.2.E** – Select, use, and identify manufacturing systems. | |

## Woods II

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|---|---|
| **Unit 1:** Advanced Woodworking Industry Knowledge and Material Science | **Duration:** 5 days |
| **Unit Objective:**<br><br>Students will analyze the woodworking and construction industries, explore career paths, and deepen their understanding of wood materials and project cost estimation to prepare for advanced woodworking applications. | |
| **Priority Standards:**<br><br>● **TE.AC.1** — Students will explore the career fields of architecture and | **Learning Targets ("I Can" Statements):**<br><br>● I can analyze the woodworking and construction industries, including |

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| construction.<br><br>● **TE.AC.1.A** — Analyze the architecture and construction industry.<br><br>● **TE.AC.2.B** — Analyze construction requirements, materials, structures, techniques, and maintenance.<br><br>● **TE.AC.2.G** — Demonstrate the impact of financial, technical, environmental, political, societal, and labor trends of the past and the future of the construction industry. | emerging career paths and specializations.<br>● I can evaluate the properties and applications of different wood species, distinguishing hardwoods from softwoods.<br>● I can calculate board footage and project costs, incorporating waste factors and budgeting principles.<br>● I can explain how economic, environmental, and societal trends impact woodworking practices and opportunities.<br>● I can identify and describe common woodworking joints and their structural uses in complex projects. |
| **Supporting Standards:**<br><br>● **TE.BB.1.A** — Research and identify education, salary, and job outlook of careers.<br>● **TE.AC.2.F** — Demonstrate the variety of building phases, materials, systems, and techniques used in architecture and construction. | |

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| **Unit 2:** Precision Measurement, Layout, and Tool Mastery | **Duration:** 10 days |
| **Unit Objective:**<br><br>Students will master advanced measuring and layout tools, demonstrate safe and precise tool usage, and apply occupational safety principles in woodworking environments. | |
| **Priority Standards:**<br><br>● **TE.AC.2.A** — Demonstrate the safe and appropriate use of all tools common to the construction industry.<br><br>● **TE.AC.2.C** — Apply measurement systems in the planning and layout process used in the construction | **Learning Targets ("I Can" Statements):**<br><br>● I can accurately use advanced measuring and layout tools, including digital devices, for woodworking projects.<br>● I can demonstrate safe operation and maintenance of hand and power tools used in woodworking. |

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| industry.<br><br>● **TE.AC.2.E** — Demonstrate the value and necessity of practicing occupational safety in the construction industry facility and on the job site.<br><br>● **TE.AC.2.B** — Analyze construction requirements, materials, structures, techniques, and maintenance. | ● I can implement occupational safety practices specific to woodworking environments and equipment.<br>● I can apply precise measurement techniques to ensure accuracy in project planning and execution.<br>● I can analyze how construction techniques influence tool selection and use for different woodworking tasks. |
| **Supporting Standards:**<br><br>● **TE.BB.3.A** — Analyze and demonstrate occupational health and safety precautions, procedures, and regulations.<br>● **TE.MFG.2.A** — Identify, select, and safely use tools, machines, products, and systems for specific tasks. | |

| **Unit 3:** Project Planning, Technical Drawing Interpretation, and Problem Solving | **Duration**: 10 days |
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| **Unit Objective:**<br><br>Students will develop comprehensive woodworking project plans, interpret technical drawings and blueprints, and apply problem-solving and project management skills to achieve project success. | |
| **Priority Standards:**<br><br>● **TE.AC.2.D** — Demonstrate project management procedures and processes as they occur in a construction process.<br><br>● **TE.AC.2.H** — Demonstrate architectural and design principles in the planning and ideation phase used in architecture and construction. | **Learning Targets ("I Can" Statements):**<br><br>● I can develop detailed woodworking project plans incorporating all phases from ideation to completion.<br>● I can interpret advanced working drawings, blueprints, and CAD files relevant to woodworking projects.<br>● I can apply problem-solving strategies to overcome design and construction challenges. |

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| • **TE.ENG.2.A** — Explain reasons for using an engineering design process.<br>• **TE.ENG.2.B** — Define the problem. | • I can manage time and resources effectively throughout the woodworking project lifecycle.<br>• I can integrate architectural and engineering design principles into woodworking project planning. |
| **Supporting Standards:**<br>• **TE.ENG.2.F** — Create a design proposal.<br>• **TE.ENG.3.A** — Apply time management methods. | |

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| **Unit 4:** Advanced Wood Preparation, Joinery, and Finishing Techniques | **Duration**: 20 days |
| **Unit Objective:**<br>Students will refine wood preparation, joinery, and finishing skills using advanced techniques and materials to produce high-quality, durable woodworking projects. | |
| **Priority Standards:**<br>• **TE.AC.2.B** — Analyze construction requirements, materials, structures, techniques, and maintenance.<br>• **TE.AC.2.F** — Demonstrate the variety of building phases, materials, systems, and techniques used in architecture and construction.<br>• **TE.MFG.2.D** — Select, use, and identify manufacturing processes such as casting, forming, machining, joining, computer-controlled manufacturing (CNC), and treating/coating.<br>• **TE.ENG.4.D** — Select proper materials to construct a prototype model. | **Learning Targets ("I Can" Statements):**<br>• I can execute precise wood preparation and squaring techniques using advanced tools and geometric principles.<br>• I can select and apply the appropriate woodworking joints for strength, function, and aesthetics.<br>• I can identify and use different abrasive materials and sanding methods to prepare wood surfaces for finishing.<br>• I can apply advanced finishing techniques to achieve desired durability and appearance on woodworking projects.<br>• I can evaluate and select finishes based on environmental impact, safety, and project requirements. |

**Supporting Standards:**

- **TE.ENG.4.K** — Use various types of tools to create a prototype model.
- **TE.AC.2.A** — Demonstrate the safe and appropriate use of all tools common to the construction industry.