Cosmetology I

Primary Career Cluster:	Human Services
Course Contact:	CTE.Standards@tn.gov
Course Code:	C19H12
Prerequisite:	None
Credit:	1
Grade Level(s):	9-10
Student-Teacher Ratio:	20:1 (T.C.A. § 62-4-120)
Elective Focus - Graduation Requirements:	This course satisfies one of three credits required for an elective focus when taken in conjunction with other Human Services courses.
Program of Study (POS) Concentrator:	This course satisfies one out of two required courses to meet the Perkins V concentrator definition when taken in sequence in the approved program of study.
Programs of Study and Sequence:	This is the Year 1 course in the *Cosmetology* program of study.
Aligned Student Organization:	SkillsUSA: https://www.skillsusatn.org/
Coordinating Work-Based Learning:	Teachers are encouraged to use embedded WBL activities such as informational interviewing, job shadowing, and career mentoring. For information, visit https://www.tn.gov/education/educators/career-and-technical-education/work-based-learning.html.
Promoted Tennessee Student Industry Credentials:	Credentials are aligned with postsecondary and employment opportunities and with the competencies and skills that students acquire through their selected program of study. For a listing of promoted student industry credentials, visit https://www.tn.gov/education/educators/career-and-technical-education/student-industry-certification.html.
Teacher Endorsement(s):	561, 781
Required Teacher Certifications:	Tennessee Cosmetologist License and Tennessee Cosmetology Instructor License Please refer to Occupational Educator Licensure Guidance for a full list.
Required Teacher Training:	None
Teacher Resources:	https://www.tn.gov/education/educators/career-and-technical-education/career-clusters/cte-cluster-human-services.html Best for All Central: https://bestforall.tnedu.gov

Course at a Glance

CTE courses provide students with an opportunity to develop specific academic, technical, and 21st-century skills necessary to be successful in careers and life. In pursuit of ensuring every student in Tennessee achieves this level of success, we begin with rigorous course standards that feed into intentionally designed programs of study.

Students engage in industry-relevant content through general education integration and experiences such as career and technical student organizations (CTSO) and work-based learning (WBL). Through these experiences, students are immersed with industry-standard content and technology, solve industry-based problems, meaningfully interact with industry professionals, and use/produce industry-specific, informational texts.

Using a Career and Technical Student Organization (CTSO) in Your Classroom
CTSOs are a great resource to put classroom learning into real-life experiences for students through classroom, regional, state, and national competitions, and leadership opportunities. Below are CTSO connections for this course; note this is not an exhaustive list.
- Participate in the CTSO Fall Leadership Conference to engage with peers by demonstrating logical thought processes and developing industry-specific skills that involve teamwork and project management.
- Participate in contests that highlight job skill demonstration, interviewing skills, community service activities, extemporaneous speaking, and job interviews.
- Participate in leadership activities such as Student2Student Mentoring, National Week of Service, Officer Training, and Community Action Project.

Using Work-Based Learning (WBL) in Your Classroom
Sustained and coordinated activities related to the course content are the key to successful work-based learning. Possible activities for this course include the following. This is not an exhaustive list.
- **Standards 1.1-2.3** |Interview licensed cosmetologists to learn more about the profession and the pathways to pursue for all areas of the profession.
- **Standards 3.1-4.3** | Complete a safety inspection of hair stations to show the mastery of safety, sanitation, and efficient work practices. Provide recommendations to improve work areas.
- **Standards 5.1-6.2** | Perform proper hair and nail care on potential clients.
- **Standard 7.1** | Using the data analysis information, create a business based on the needs of your region.

Course Description

Cosmetology I is the foundational course in the Human Services career cluster for students interested in learning more about becoming a cosmetologist. Upon completion of this course, proficient students will gain knowledge in the fundamental skills in both theory and practical applications of cosmetology practices. Laboratory facilities and experiences simulate those found in the cosmetology industry. Upon completion and acquisition of 1500 hours, students are eligible to take the Tennessee Board of Cosmetology Examination to attain a Tennessee Cosmetology License.

Course Standards

1. **History and Influences of the Cosmetology Industry**

   1.1 <u>History of Cosmetology</u>: Research **historical and significant milestones** that influenced cosmetology changes from the beginning of civilization to the present. Identify **significant time periods and major impacts of the cosmetology trends** on the progression of various styles and progression of tools and equipment.

   1.2 <u>History of Techniques</u>: Identify and compare **ancient methods that have evolved into techniques being used today**. Compare and contrast the dramatic changes in cosmetic and hair styles and treatments.

   1.3 <u>Influential Beauty Industry Professionals</u>: Research and identify the **contributions of major influential individuals** (historical and current professionals) **of the professional beauty industry** and align their contributions with current beauty trends. Examples of significant contributors include, but are not limited to the following:
       a. Max Factor,
       b. Vidal Sassoon,
       c. Madam C.J. Walker, and
       d. T.L. Williams.

2. **Cosmetology Career Exploration**

   2.1 <u>Career Pathways</u>: Analyze **career pathways within the cosmetology program of study**. Use multiple sources, such as local job postings and Tennessee Department of Labor and Workforce Development data, to describe the **education requirements, job availability, salaries, and benefits**. Careers may include the following:
       a. salon hairstylist,
       b. salon owner/manager,
       c. skin care specialist,
       d. nail technician,
       e. natural hair stylist,
       f. makeup artist,
       g. cosmetology instructor,

       h.   state board examiner,
       i.   photo/movie/theatre stylist,
       j.   platform stylist,
       k.   cosmetic sales representative, and
       l.   cosmetic research chemist.

2.2 <u>Personal Characteristics and Aptitudes</u>: Describe **personal characteristics and aptitudes**, including 21st-century skills needed by cosmetologists. Create a rubric for self-assessing 21st-century skills and use it to evaluate course assignments and personal work. Examples include the ability to do the following:
    a.   communicate verbally and nonverbally in a respectful manner with clients and coworkers,
    b.   work effectively in teams and resolve conflicts, when necessary,
    c.   demonstrate a positive work ethic,
    d.   understand different cultures and their impact on design and hairstyles,
    e.   adapt to changes, and
    f.   manage time and resources wisely.

2.3 <u>Career and Technical Student Organization Introduction</u>: Introduce the program's aligned **Career and Technical Student Organization** (CTSO), **SkillsUSA**, through an interactive activity, such as a classroom competition.

2.4 <u>Ethical Artificial Intelligence (AI)</u>: **Explore the ethical implications of AI usage** through interactive discussions and case studies, learning to identify bias, ensure fairness, and protect privacy in AI systems. **Develop** critical thinking **skills to evaluate the societal impact of AI technologies**, while fostering a sense of responsibility and ethical decision-making in the use of AI tools.

3. Cosmetology State Laws and Licensure

3.1 <u>Cosmetology Laws and Licensing</u>: Gather research and analyze information from the **Tennessee Department of Commerce and Insurance-Cosmetology** and **Barber Examiners** to explain important connections to the following:
    a.   sanitation, disinfection, and safety laws, including cleaning and disinfecting of implements and equipment;
    b.   cleaning and disinfecting the work environment and sanitary procedures and pathogens;
    c.   licensing, certification, and industry credentialing requirements; and
    d.   legal responsibilities, behaviors, and practices/procedures (ethical vs. unethical, legal vs. illegal).

4. Safety, Sanitation, and Efficient Work Practices

4.1 <u>Emergencies and Procedures</u>: Define and differentiate possible **emergencies and emergency procedures**, such as universal precautions and blood exposure. Identify **decontamination procedures** to ensure the safety of the client and/or peers in the classroom and laboratory.

4.2 <u>Chemical Safety</u>: Demonstrate proper **set-up and operation of equipment and utilization of materials** by mixing disinfectants in appropriate proportions according to the manufacturer's instructions. Complete training to receive certification for **mixing disinfectants** such as Barbicide. Clean and maintain implements by using appropriately mixed chemicals and follow procedures for **decontamination of tools** in accordance with **Occupational Safety and Health Administration (OSHA) and Environmental Protection Agency (EPA) guidelines**.

4.3 <u>Sanitation Procedures</u>: Practice and critique procedures for maintaining a **safe and sanitary environment** for clients present in a cosmetology facility.
    a. Evaluate government agencies that ensure safety and sanitation for the cosmetology industry.
    b. Identify pathogens common to the salon setting.
    c. Demonstrate proper sanitation and disinfection for the salon to prevent illness, communicable diseases, and injuries.
    d. Complete an instructor-made safety test with 100 percent accuracy.

5. Properties and Procedures for Hair

5.1 <u>Anatomy and Physiology of the Hair</u>: Describe, identify, and analyze **the functions, structures, diseases, and disorders of the hair**.
    a. Explain the structures of the hair root and hair shaft.
    b. Identify and evaluate the following: growth cycles of the hair, hair loss causes and treatments, hair disorders, and scalp disorders.

5.2 <u>Properties of Hair and Scalp</u>: Apply concepts related to the **properties of the hair and scalp physiology** to perform a **hair and scalp analysis**, including the following factors: texture, density, porosity, elasticity, hair growth patterns, and dry or oily hair and scalp.

5.3 <u>Properties of Hair Design</u>: Demonstrate concepts related to the **properties of hair design** to apply the following:
    a. define and give examples of the elements of hair design;
    b. identify, define, and give examples of the principles of hair design;
    c. recognize and explain the importance and influence of hair type and texture to a client's hairstyle;
    d. define and explain the changes that influence hairstyles with different combinations of hair types and textures;
    e. critique each facial shape to devise the best hairstyle for each. explaining the purpose for each hairstyle as it relates to the facial shapes and hair properties; and
    f. perform a client consultation for any given hair service.

5.4 <u>Proper Scalp Care</u>: Demonstrate or explain the techniques and benefits used in **proper scalp care, shampooing, conditioning, and draping** as it relates to the following:
    a. massage and specialized treatments,
    b. hair brushing,

      c.   shampoo and conditioning services, and

      d.   professional draping.

   5.5 <u>Basic Hairstyling and Implements</u>: Identify, describe, and effectively demonstrate basic **hairstyling techniques** and **manipulating implements** appropriately, including the following:

      a.   sectioning,

      b.   wet hairstyling,

      c.   roller curls,

      d.   comb-out techniques,

      e.   thermal hairstyling, and

      f.   braiding.

6. Properties and Procedures for Skin and Nails

   6.1 <u>Anatomy and Physiology of the Skin and Nails</u>: Describe and identify the **structures, functions, diseases, and disorders of skin and nails**.

   6.2 <u>Hand, Nail, and Skin Analysis</u>: Perform a hand, nail, and skin analysis for a client. Use **sanitary and safety precautions** necessary for procedures including proper **decontamination and infection control procedures**. Demonstrate proper **use of implements and equipment** for manicure and pedicure procedures.

7. Data Analysis

   7.1 <u>Data Analysis in Human Services</u>: Research the use of **data in Human Service** career fields. **Include data** that is generated internally by businesses, and externally by local communities, state, and the nation. Explore examples of **how the data is used**, including the following:

      a.   customer/client use of products and services;

      b.   demographics of end users;

      c.   community, state, and national statistics; and

      d.   Data that must be reported to another entity.

Standards Alignment Notes

*References to other standards include:
- P21: Partnership for 21st Century Skills [Framework for 21st Century Learning](#)
  - Note: While not all standards are specifically aligned, teachers will find the framework helpful for setting expectations for student behavior in their classroom and practicing specific career readiness skills.

Cosmetology II

Primary Career Cluster:	Human Services
Course Contact:	CTE.Standards@tn.gov
Course Code:	C19H14
Prerequisite:	*Cosmetology I (*C19H12*)*
Credit(s):	1 credit for theoretical standards. 2 credits for all 24 standards (theoretical and practical).
Grade Level(s):	10-11
Student-Teacher Ratio:	20:1 (T.C.A. § 62-4-120)
Elective Focus - Graduation Requirements:	This course satisfies one of three credits required for an elective focus when taken in conjunction with other Human Services courses.
Program of Study (POS) Concentrator:	This course satisfies one out of two required courses to meet the Perkins V concentrator definition when taken in sequence in the approved program of study.
Programs of Study and Sequence:	This is the Year 2 course in the *Cosmetology* program of study.
Aligned Student Organization:	SkillsUSA: https://www.skillsusatn.org/
Coordinating Work-Based Learning:	Teachers are encouraged to use embedded WBL activities such as informational interviewing, job shadowing, and career mentoring. For information, visit https://www.tn.gov/education/educators/career-and-technical-education/work-based-learning.html.
Promoted Tennessee Student Industry Credentials:	Credentials are aligned with postsecondary and employment opportunities and with the competencies and skills that students acquire through their selected program of study. For a listing of promoted student industry credentials, visit https://www.tn.gov/education/educators/career-and-technical-education/student-industry-certification.html.
Teacher Endorsement(s):	561, 781
Required Teacher Certifications:	Tennessee Cosmetologist License and Tennessee Cosmetology Instructor License Please refer to Occupational Educator Licensure Guidance for a full list.
Required Teacher Training:	None
Teacher Resources:	https://www.tn.gov/education/educators/career-and-technical-education/career-clusters/cte-cluster-human-services.html Best for All Central: https://bestforall.tnedu.gov

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Students engage in industry-relevant content through general education integration and experiences such as career and technical student organizations (CTSO) and work-based learning (WBL). Through these experiences, students are immersed with industry-standard content and technology, solve industry-based problems, meaningfully interact with industry professionals, and use/produce industry-specific, informational texts.

Using a Career and Technical Student Organization (CTSO) in Your Classroom

CTSOs are a great resource to put classroom learning into real-life experiences for students through classroom, regional, state, and national competitions, and leadership opportunities. Below are CTSO connections for this course; note this is not an exhaustive list.

- Participate in the CTSO Fall Leadership Conference to engage with peers by demonstrating logical thought processes and developing industry-specific skills that involve teamwork and project management.
- Participate in contests that highlight job skill demonstration, interviewing skills, community service activities, extemporaneous speaking, and job interviews.
- Participate in leadership activities such as Student2Student Mentoring, National Week of Service, Officer Training, and Community Action Project.

Using Work-Based Learning (WBL) in Your Classroom

Sustained and coordinated activities related to the course content are the key to successful work-based learning. Possible activities for this course include the following. This is not an exhaustive list.

- **Standard 1.1** | Interview local postsecondary instructors to learn more about opportunities upon secondary graduation.
- **Standards 2.1-2.3** | Perform mock sanitation inspections on the workstations of other classmates, providing recommendations on how to improve compliance with regulations.
- **Standards 3.1-3.2** | Create a visual aid to illustrate the varying anatomical responses to provided services from the service provider.
- **Standards 4.1-7.3** | Under the supervision of the instructor, provide skin, nail, hairstyling, and haircutting services to potential volunteer clients.
- **Standards 8.1-9.3** | Demonstrate the varying chemical services and mastery of standards on class mannequins.
- **Standards 10.1-10.2** | Using the business startup process and following the cosmetology laws, create an informational artifact that explains the business ownership for the state of Tennessee.

Course Description

Cosmetology II is the Year 2 course in the *Cosmetology* program of study intended to prepare students for careers in cosmetology by developing an understanding of efficient and safe work practices, nail procedures, hair design, and chemical services. Students will gain experience in practical applications of cosmetology practices. Laboratory facilities and experiences simulate those found in the cosmetology industry. Upon completion and acquisition of 1500 hours, students are eligible to take the Tennessee Board of Cosmetology Examination to attain a Tennessee Cosmetology License.

Recommended Credit

If offering *Cosmetology II* for 1 credit, follow Option A (theoretical & practical standards). If the offering the course for 2 credits, follow Option B (theoretical and expanded practical standards). If all standards in the course are covered, the course is recommended for two credits.

1 Credit – Option A

Content	Standards
Cosmetology Career Readiness	1.1
Safety, Sanitation, & Efficient Work Practices	2.1, 2.2, 2.3
Anatomical Response to Services	3.1, 3.2
Hair Styling Procedures	6.1, 6.2, 6.3, 6.4
Haircutting Procedures	7.1, 7.2, 7.3
Chemical Services: Texture	8.1, 8.2, 8.3
Chemical Services: Color	9.1, 9.2, 9.3
Salon Ownership	10.1, 10.2

2 Credits – Option B

Content	Standards
Cosmetology Career Readiness	1.1
Safety, Sanitation, & Efficient Work Practices	2.1, 2.2, 2.3
Anatomical Response to Services	3.1, 3.2
Skin Procedures	4.1
Nail Procedures	5.1
Hair Styling Procedures	6.1, 6.2, 6.3, 6.4
Haircutting Procedures	7.1, 7.2, 7.3
Chemical Services: Texture	8.1, 8.2, 8.3
Chemical Services: Color	9.1, 9.2, 9.3
Salon Ownership	10.1, 10.2

1. Cosmetology Career Readiness

1.1 <u>Postsecondary Education</u>: Research and assess **apprenticeships and postsecondary institutions** (colleges of applied technology, community colleges, and four-year universities) in Tennessee and other states that offer **cosmetology-related programs**. Evaluate each **license** that is attainable in the cosmetology field. Develop a **career pathway** plan outlining academic and career achievement goals and objectives.

2. Safety, Sanitation, and Efficient Work Practices

2.1 <u>Sanitation Procedures</u>: Practice and critique procedures for maintaining a **safe and sanitary environment** for clients present in a cosmetology facility.
   a. Evaluate government agencies that ensure safety and sanitation for the cosmetology industry.
   b. Identify pathogens common to the salon setting.
   c. Demonstrate proper sanitation and disinfection for the salon to prevent illness, communicable diseases, and injuries.
   d. Complete an instructor-made safety test with 100 percent accuracy.
   e. Clean and maintain implements by using appropriately mixed chemicals and follow procedures for decontamination of tools in accordance with Occupational Safety and Health Administration (OSHA) and Environmental Protection Agency (EPA) guidelines.

2.2 <u>Chemical Safety</u>: Demonstrate proper **set-up and operation of equipment and utilization of materials** by mixing disinfectants in appropriate proportions according to the manufacturer's instructions. Complete training to receive certification for **mixing disinfectants** such as Barbicide. Clean and maintain implements by using appropriately mixed chemicals and follow procedures for **decontamination of tools** in accordance with **OSHA and EPA guidelines.**

2.3 <u>Equipment and Back Safety</u>: Demonstrate and explain the **rationale** behind the following **safety concepts**:
   a. demonstrate proper posture and body positions during haircutting procedures;
   b. demonstrate proper set-up and operation of equipment; and
   c. differentiate the nature of electricity and electric currents and describe the relationship of electric currents to the electromagnetic spectrum as it pertains to electrical safety.

3. Anatomical Response to Services

3.1 Anatomy Structure and Function: Summarize the different **functions, structures, diseases, and disorders of hair, skin, and nails**, and explain how to properly care for hair, skin, and nails through cleanliness, nutrition, and healthful living.

3.2 Response to Treatments and Services: Compare and contrast how a **client's hair, skin, and nail anatomy reacts to various treatments and services**. Explain why recognizing the differences between **normal and abnormal anatomy** is important in determining whether **specific treatments and services** are appropriate.

4. Skin Procedures

4.1 Proper Skin Procedures: Demonstrate **proper skin procedures**:
   a. evaluate the muscular and skeletal anatomy of the head/cranium,
   b. demonstrate a skin care service client consultation,
   c. demonstrate a wax service,
   d. demonstrate the basic make-up application, and
   e. demonstrate a facial with and without cleansing with ionization.

5. Nail Procedures

5.1 Proper Nail Procedures: Demonstrate **proper nail procedures**:
   a. Demonstrate proper removal of all materials.
   b. Use correct techniques to apply nail tips, including all sanitary and safety procedures and chemical processes.
   c. Evaluate concepts related to the advanced artificial nail techniques to demonstrate the following while adhering to all manufacturer's directions and safety procedures:
       i. Correctly apply artificial material, acrylic, dip, and gels, to the free edge of the natural nail and or to the full natural nail.

6. Hair Styling Procedures

6.1 Proper Hair Procedures: Differentiate and demonstrate the proper **techniques used in scalp care, shampooing, conditioning, and draping**, including head massage and specialized treatments, hair brushing, shampoo and conditioning services, and sectioning.

6.2 Hairstyling Techniques and Implements: Identify, describe, and effectively demonstrate **hairstyling techniques and manipulating implements** appropriately, including the following:
   a. advanced hairstyling techniques,
   b. advanced braiding,
   c. sectioning,

d. wet hairstyling,
e. roller curls,
f. comb-out techniques, and
g. thermal hairstyling

6.3 Wig Care: Evaluate different types of **wigs** and demonstrate **proper care and storage.**Natural Hair Care Services: Demonstrate **basic natural hair care services** to include but not limited to the following:
a. extensions,
b. braiding,
c. twisting,
d. wefts, and
e. locks.

7. Haircutting Procedures

7.1 Principles of Haircuts: Incorporating **geometric principles**, identify and analyze the purpose and interrelationships related to **various haircuts**.
a. Compare and contrast head form and reference points used in the basic principles of haircutting.
b. Compare or contrast balance and consistency related to techniques using the razor, shears, or clippers.
c. Explain and demonstrate the purpose and importance of safety precautions and holding techniques when using various hair-cutting tools (razor, shears, clippers, or thinning shears).

7.2 Haircutting Basics: Compare and contrast **lines, angles, and elevation** related to **basic principles of hair cutting** when performing and creating various haircuts that incorporate the following:
a. uniform layered haircut using 90° elevation,
b. long layered haircut using 180° elevation,
c. graduated haircut using 45° elevation, and
d. blunt haircut using 0° elevation.

7.3 Haircutting Terms: Research and describe the use of the following **hair-cutting terms** based on an effective mock **client consultation** incorporating face shape and hair analysis that relate to the following:
a. lines,
b. sections,
c. angles,
d. elevation,
e. guideline or design line,
f. over direction,
g. head form, and
h. reference points.

8. **Chemical Services: Texture**

   8.1 <u>Chemical Composition of Hair</u>: Analyze and illustrate the **chemical composition of the hair** including side bonds of the cortex, hair pigment, wave pattern, and curly hair.<u>Waving Service Consultation</u>: Demonstrate a **client consultation for permanent waving service.**

   8.2 <u>Chemical Structure of the Hair</u>: Evaluate the **chemical structure and pH of hair** and differentiate between the **chemical texture services** based on how each service affects the **structure and pH of the hair**, including distinguishing factors between **hydrogen and disulfide bonds.**

9. **Chemical Services: Color**

   9.1 <u>Chemistry of Hair Coloring</u>: Examine the roles of organic and inorganic chemistry, different states of matter, oxidation-reduction reactions, and pure substances and physical mixtures as they relate to hair color. Identify and analyze the **formulation of hair color** in relation to **hair properties**. Define and analyze the **classification of hair coloring and lightening** and give reasons clients color their hair.

   9.2 <u>Hair Coloring Developers and Lighteners</u>: Evaluate **chemicals used in the hair coloring process** including developers and lighteners.
         a. Explain melanin's role in the hair coloring process.
         b. Explain the role of hydrogen peroxide in hair color formulas.
         c. Compare and contrast lightener processes.

   9.3 <u>Color Theory</u>: Analyze the **color wheel** and apply concepts of **color theory** to the development of hair color. Identify techniques that achieve desired hues, values, and intensities. Demonstrate the ability to **color mix in various color systems**, including color corrections.

10. **Salon Ownership**

   10.1 <u>Business Startup Process</u>: Describe **key components of the cosmetology business startup process** (the entrepreneur, the environment, the opportunity, startup resources, and state laws, regulations, and legal responsibilities). Explain each component and identify the **risks and rewards**, highlighting the advantages and disadvantages of owning a business versus working for someone else.

   10.2 <u>Cosmetology Law</u>: Research and summarize all **state laws and licensing procedures** in the cosmetology field, including but not limited to the cosmetologist license, specialist license, salon license, instructor license, and cosmetology school license.

11. Team Project

    11.1 <u>Team Project with Data Analysis</u>: As a team, **identify a problem** related to the program of study as a whole. **Research and utilize the Engineering Design Process** to design a solution. Document the following steps in an engineering design notebook for inclusion in the program portfolio. When possible, connect the problem to an existing SkillsUSA event.

        a. **Problem Identification**: Brainstorm specific problems and challenges within the program of study. Conduct basic research to understand the scope and implications of the identified problem. Identify one problem as a focus area.
        b. **Research and Analysis**: Conduct in-depth research on chosen topics related to the problem. Locate and analyze a dataset related to the problem.
        c. **Review the Stages of the Engineering Design Process**: Define the problem, research, brainstorm solutions, develop prototypes, test and evaluate, and iterate. Consider constraints such as cost, efficiency, and environmental impact during the design process.
        d. **Project Implementation**: Assign specific roles within the design teams (e.g., project manager, researcher, designer, tester). Design a solution tailored to address the identified problem or scenario. Document progress through design journals, sketches, diagrams, and digital presentations. (Note: Prototype is optional in the Year 2 course.)
        e. **Presentation and Reflection**: Showcase the problem and solution to the class. Share the data that was analyzed and how it affected the solution. Discuss the design process and challenges. As a class, critically evaluate the effectiveness and feasibility of the solutions and propose potential improvements.

Standards Alignment Notes

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Cosmetology III

Primary Career Cluster:	Human Services
Course Contact:	CTE.Standards@tn.gov
Course Code:	C19H13
Prerequisite(s):	*Cosmetology I (*C19H12*)* and *Cosmetology II (*C19H14*)*
Credit(s):	1 credit for theoretical standards. 2 credits for all 24 standards (theoretical and practical).
Student-Teacher Ratio:	20:1 (T.C.A. § 62-4-120)
Grade Level(s):	11-12
Focus Elective - Graduation Requirements:	This course satisfies one of three credits required for an elective focus when taken in conjunction with other Human Services courses.
POS Concentrator:	This course satisfies one out of two required courses to meet the Perkins V concentrator definition, when taken in sequence in the approved program of study.
Programs of Study and Sequence:	This is the Year 3 course in the *Cosmetology* program of study.
Aligned Student Organization:	SkillsUSA: https://www.skillsusatn.org
Coordinating Work-Based Learning:	Teachers are encouraged to use embedded WBL activities such as informational interviewing, job shadowing, and career mentoring. For information, visit https://www.tn.gov/education/educators/career-and-technical-education/work-based-learning.html..
Promoted Tennessee Student Industry Certifications:	Credentials are aligned with postsecondary and employment opportunities and with the competencies and skills that students acquire through their selected program of study. For a listing of promoted student industry credentials, visit https://www.tn.gov/education/educators/career-and-technical-education/student-industry-certification.html
Teacher Endorsement(s):	561, 781
Required Teacher Certifications:	Tennessee Cosmetologist License and Tennessee Cosmetology Instructor License Please refer to Occupational Educator Licensure Guidance for a full list.
Required Teacher Training:	None
Teacher Resources:	https://www.tn.gov/education/educators/career-and-technical-education/career-clusters.html Best for All Central: https://bestforall.tnedu.gov

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- Participate in the CTSO Fall Leadership Conference to engage with peers by demonstrating logical thought processes and developing industry specific skills that involve teamwork and project management.
- Participate in contests that highlight job skill demonstration, interviewing skills, community service activities, extemporaneous speaking, and job interview.
- Participate in leadership activities such as Student2Student Mentoring, National Week of Service, Employment Application Process, and Community Action Project.

Using a Work-Based Learning (WBL) in Your Classroom

Sustained and coordinated activities that relate to the course content are the key to successful work-based learning. Possible activities for this course include the following. This is not an exhaustive list.

- **Standards 1.1** | Create an informational artifact highlighting the career pathways in the cosmetology field that are in demand in Tennessee.
- **Standards 2.1-2.3** | Interview a salon owner to discuss the safety, sanitation, and efficient work practices that are used within their business.
- **Standards 3.1-3.2** | Research the various ways that hair, skin, and nails respond to treatments and services, presenting your gathered information to local salon owners.
- **Standards 4.1-5.3** | Demonstrate advanced skills for hair and chemical services to potential clients.
- **Standards 6.1-6.4** | Demonstrate mastery of facial and skin care techniques through services to potential clients.
- **Standards 7.1** | Create a school-run nail business to provide services to teachers and students.
- **Standards 8.1-8.4** | Form a business plan to develop a start-up salon in your area, utilizing regional data to project the needs of potential customers.

Course Description

Cosmetology III is the Year 3 course in the *Cosmetology* program of study intended to prepare students for careers in cosmetology by developing an understanding of efficient and safe work practices, salon business concepts and operations, advanced hair techniques and chemical services, and facial and skin care procedures. Students will gain experience in practical applications of cosmetology practices. Laboratory facilities and experiences simulate those found in the cosmetology industry. Upon completion and acquisition of 1500 hours, students are eligible to take the Tennessee Board of Cosmetology Examination to attain a Tennessee Cosmetology License.

Recommended Credit

If offering *Cosmetology II* for 1 credit, follow Option A (theoretical and practical standards). If the offering the course for 2 credits, follow Option B (theoretical and expanded practical standards). If all standards in the course are covered, the course is recommended for two credits.

Entrepreneurship in the Cosmetology Industry	8.1, 8.2, 8.3, 8.4

1 Credit – Option A

Content	Standards
Cosmetology Career Application	1.1
Safety, Sanitation, & Efficient Work Practices	2.1, 2.2, 2.3
Anatomical Response to Services	3.1, 3.2
Advance Properties and Procedures for Hair	4.1, 4.3, 4.4
Advanced Techniques in Chemical Services	5.2, 5.3
Facials & Skin Care	6.1, 6.3, 6.4
Entrepreneurship in the Cosmetology Industry	8.1, 8.2, 8.3, 8.4

2 Credits – Option B

Content	Standards
Cosmetology Career Application	1.1
Safety, Sanitation, & Efficient Work Practices	2.1, 2.2, 2.3
Anatomical Response to Services	3.1, 3.2
Advance Properties and Procedures for Hair	4.1, 4.2, 4.3, 4.4
Advanced Techniques in Chemical Services	5.1, 5.2, 5.3
Facials & Skin Care	6.1, 6.2, 6.3, 6.4
Advanced Nail Techniques	7.1

Course Standards

1. Cosmetology Career Application

1.1 <u>Cosmetology Career Pathways</u>: Explore and evaluate **career pathways** in the field of **cosmetology**.

2. Safety, Sanitation, and Efficient Work Practices

2.1 <u>Salon Safety</u>: Identify **safety hazards** and demonstrate **practices for safe working conditions**. Evaluate **government agencies** and **government approved agencies** that ensure **safety and sanitation** for the cosmetology industry such as Occupational Safety and Health Administration (OSHA) and Underwriters Laboratories. Identify guidelines that prevent illness, injury, and disease; and implement salon safety practices. Safety hazards may include fire, electrical, chemical, and infection.

2.2 <u>Sanitation and Disinfection</u>: Demonstrate proper **sanitation and disinfection** for the salon and explain the rationale behind each of the following concepts:
   a. identify appropriate disinfection chemicals,
   b. proper mixing of disinfection chemicals in appropriate proportions according to manufacturer's instructions, and
   c. proper equipment and tool disinfection.

2.3 <u>Blood Exposure</u>: Simulate **blood exposure** procedures on a minor mock cut or abrasion properly disposing of waste material.

3. Anatomical Response to Services

3.1 <u>Anatomy Structure and Function</u>: Summarize the different **functions, structures, and diseases and disorders of hair, skin, and nails**, how to **properly care for hair, skin, and nails** through cleanliness, nutrition, and healthful living.

3.2 <u>Response to Treatments and Services</u>: Compare and contrast how a client's **hair, skin, and nail anatomy reacts to various treatments and services**. Explain why recognizing the **differences between normal and abnormal anatomy** is important in **determining whether specific treatments and services are appropriate.**

4. Advanced Properties and Procedures for Hair

4.1 <u>Customizing Techniques and Instruments to Client's Hair</u>: Demonstrate and explain the **rationale behind each of the following concepts**:
   a. determine the risks and benefits of using specific techniques in the evaluation of clients' hair including but not limited to:
      i. scalp care,
      ii. shampooing,
      iii. conditioning,
      iv. draping,
      v. sectioning, and
      vi. specialized treatments.
   b. explain the decisions behind selection and maintenance of implements.

4.2 <u>Hairstyling Techniques</u>: Effectively demonstrate advanced **hairstyling techniques** and explain how the **elements and principles of design** are incorporated.

4.3 <u>Advanced Haircutting Techniques</u>: Identify, describe, and effectively demonstrate **advanced haircutting techniques** while **employing implements appropriately** and using proper posture and body positions:
   a. perform haircuts using guides (stationary, traveling, and combination),
   b. razor cutting,
   c. slide cutting,
   d. shears-over-comb,
   e. traveling guide haircut,
   f. whole head blending, and
   g. various weight line haircut designs.

4.4 <u>Wig and Hair Enhancements</u>: Research and summarize the rationale for cosmetologists to study **wig and hair enhancements** include the following discussion topics: the **differences between human hair and synthetic hair and categories of wigs and hairpieces** and their uses. Provide **styling tips** for clients related to categories of wigs, hairpieces, and extensions.

4.5 <u>Extension Techniques</u>: Evaluate various **extension techniques** and **application methods**:
   a. evaluating hair and scalp,
   b. proper selection of extensions,
   c. applying/removing extensions, and
   d. braiding.

5. **Advanced Techniques in Chemical Services**

5.1 <u>Chemical Texture Services</u>: Demonstrate **safe and effective concepts and procedures in chemical texture services** to perform the following while adhering to all safety processes:
   a. perm techniques,
   b. hair relaxing techniques, and
   c. curl re-forming (soft curl permanents).

5.2 <u>Haircoloring</u>: Evaluate concepts related to **hair coloring** and demonstrate the following while adhering to all directions and safety procedures:
   a. temporary hair color,
   b. semipermanent hair color,
   c. demi-permanent hair color,
   d. single-process permanent color,
   e. double-process permanent color, and
   f. toners.

5.3 <u>Advanced Hair Coloring Techniques</u>: Investigate, analyze, and demonstrate **advanced hair coloring techniques.** Analyze, describe, and demonstrate the **methods for highlighting**, including common methods as well as **specialized methods**: **ombre and balayage**. Determine the differences between ombre and balayage.

6. Facials and Skin Care

6.1 <u>Hair Removal</u>: Investigate the features of **common hair removal methods** including **consultation, contraindications for hair removal, permanent and temporary hair removal, and implements and materials**. Be able to outline steps to all hair removal procedures. State rationale for specific contraindications for hair removal.

6.2 <u>Facial</u>: Demonstrate proficiency in **performing a facial** while incorporating the following:
   a. Inspection of electrical connections and thermostatic temperatures on steamer or vaporizer following OSHA standards;
   b. inspection of electrical equipment used to perform facial cleansing and/or massage;
   c. equipment sanitation;
   d. consultation and skin analysis;
   e. selection of skin care products and equipment;
   f. facial massage manipulations and their benefits; and
   g. contraindications that prohibit performing facial treatments, including but not limited to massage with a vibrator to stimulate blood circulation.

6.3 <u>Facials for Specific Skin Types</u>: Explain and make recommendations for performing **facials** for **specific skin types**, give thorough **reasoning and explanation** for the **techniques, products, and/or equipment used for each treatment.**

6.4 <u>Make Up Application</u>: Assess concepts in **facial makeup** and determine the following while adhering to safety and sanitation procedures:
   a. identify different facial types and shapes summarizing basic makeup techniques for each;
   b. explain the purpose of and how to use the color theory when selecting cosmetics for makeup application;
   c. determine and demonstrate proper make-up removal procedures with or without a toner;
   d. perform and analyze masks and packs for various skin types (oily, dry, combination);

e. identifying the uses for the various types of cosmetics and implements; and

f. demonstrate daytime and evening makeup application.

7. Advanced Nail Techniques

7.1 <u>Advanced Nail Techniques</u>: Demonstrate **advanced nail techniques** such as **nail art, gel enhancements, and sculptured nails**.

    a. demonstrate a proper table set-up procedure for various artificial nail enhancements;

    b. use proper disinfection techniques and infection control practices throughout the performance of nail care services using the appropriate Environmental Protection Agency (EPA) mandated and registered products;

    c. compare and contrast the following:

        i. nail enhancement techniques,

        ii. primer reactions on nail enhancements, and

        iii. odor and odorless monomer on nail enhancements.

8. Entrepreneurship in the Cosmetology Industry

8.1 <u>Cosmetology Business Startup</u>: Describe **key components of the cosmetology business startup process** (the entrepreneur, the environment, the opportunity, startup resources, and state laws, regulations, and legal responsibilities). Prepare an artifact to explain each component and identify the **risks and rewards,** highlighting the **advantages and disadvantages** of owning a business versus working for someone else.

8.2 <u>Labor Market Research</u>: Investigate and research local labor market data and compare **local cosmetology industry data** to cosmetology data for the U.S. economy. Differentiate between **sole proprietorship, partnership, limited liability company (LLC), and corporations**. Examine how **business cycles, economic indicators** (i.e., interest rates, inflation, and unemployment) and **free enterprise system characteristics** such as profit motive, private property, and competition impact **business decision making**. Research, compare, and contrast investment opportunities and compile a list of advantages and disadvantages of business ownership.

8.3 <u>Business Plan</u>: Explain the **purpose of a business plan** and list the **four major parts** typically included (business description, management plan, marketing plan, and financial plan). Describe the **importance of developing a business plan** when seeking out potential investors or lenders. In preparation for a future career as a salon owner, develop an original **business philosophy** detailing one's beliefs for how a business should be run including a baseline budget and financial goals, money management concepts, procedures and strategies, and necessary personal characteristics of a successful entrepreneur.

8.4 <u>Business Startup Costs</u>: Research and examine **startup costs, operating costs, overhead, and personal expenses** by researching and developing a **financial statement** based on

local salon models obtained from public records or business websites. Contact **local lending institutions** regarding **requirements for business loans** and **needed documentation** such as personal income statement, tax records, credit reports, loan history, and personal investment. Prepare **financial statements, charts, and graphs** for the proposed business plan, including but not limited to:

    a. estimated start-up costs,
    b. projected income statement,
    c. projected balance sheet, and
    d. cash flow.

Standards Alignment Notes

*References to other standards include:
- P21: Partnership for 21st Century Skills [Framework for 21st Century Learning](#)
  - Note: While not all standards are specifically aligned, teachers will find the framework helpful for setting expectations for student behavior in their classroom and practicing specific career readiness skills.

Cosmetology IV

Primary Career Cluster:	Human Services
Course Contact:	CTE.Standards@tn.gov
Course Code:	C19H21
Prerequisite(s):	*Cosmetology I (*C19H12*), Cosmetology II (*C19H14*),* and *Cosmetology III (*C19H13*)*
Credit(s):	1 credit for theoretical standards. 2 credits for all 20 standards (theoretical and practical).
Grade Level(s):	11-12
Student-Teacher Ratio:	20:1 (T.C.A. § 62-4-120)
Elective Focus - Graduation Requirements:	This course satisfies one of three credits required for an elective focus when taken in conjunction with other Human Services courses.
Program of Study (POS) Concentrator:	This course satisfies one out of two required courses to meet the Perkins V concentrator definition when taken in sequence in the approved program of study.
Programs of Study and Sequence:	This is the Year 4 and final course in the *Cosmetology* program of study.
Aligned Career Technical Student Organization:	SkillsUSA: https://www.skillsusatn.org
Coordinating Work-Based Learning:	Teachers who hold an active WBL certificate may offer placement for credit when the requirements of the state board's WBL Framework and the Department's WBL Policy Guide are met. For information, visit https://www.tn.gov/education/educators/career-and-technical-education/work-based-learning.html.
Promoted Tennessee Student Industry Credentials:	Credentials are aligned with postsecondary and employment opportunities and with the competencies and skills that students acquire through their selected program of study. For a listing of promoted student industry credentials, visit https://www.tn.gov/education/educators/career-and-technical-education/student-industry-certification.html.
Teacher Endorsement(s):	561, 781
Required Teacher Certifications:	Tennessee Cosmetologist License and Tennessee Cosmetology Instructor License Please refer to Occupational Educator Licensure Guidance for a full list.
Required Teacher Training:	None
Teacher Resources:	https://www.tn.gov/education/educators/career-and-technical-education/career-clusters/cte-cluster-human-services.html Best for All Central: https://bestforall.tnedu.gov

Course at a Glance

CTE courses provide students with an opportunity to develop specific academic, technical, and 21st-century skills necessary to be successful in careers and life. In pursuit of ensuring every student in Tennessee achieves this level of success, we begin with rigorous course standards that feed into intentionally designed programs of study.

Students engage in industry-relevant content through general education integration and experiences such as career and technical student organizations (CTSO) and work-based learning (WBL). Through these experiences, students are immersed with industry-standard content and technology, solve industry-based problems, meaningfully interact with industry professionals, and use/produce industry-specific, informational texts.

Using a Career and Technical Student Organization (CTSO) in Your Classroom
CTSOs are a great resource to put classroom learning into real-life experiences for students through classroom, regional, state, and national competitions, and leadership opportunities. Below are CTSO connections for this course; note this is not an exhaustive list.
- Participate in the CTSO Fall Leadership Conference to engage with peers by demonstrating logical thought processes and developing industry-specific skills that involve teamwork and project management.
- Participate in contests that highlight job skill demonstration, interviewing skills, community service activities, extemporaneous speaking, and job interviews.
- Participate in leadership activities such as Student2Student Mentoring, National Week of Service, Officer Training, and Community Action Project.

Using Work-Based Learning (WBL) in Your Classroom
Sustained and coordinated activities that relate to the course content are the key to successful work-based learning. Possible activities for this course include the following. This is not an exhaustive list.
- **Standards 1.1-1.2** | Complete mock interviews with local industry partners.
- **Standards 2.1-6.1** | Provide salon services to clients that include skin care, nail care and enhancements, and hairstyling/cutting and chemical services.
- **Standards 7.1-7.2** | Demonstrate mastery of skills and understanding through completion of practice state board exams.
- **Standards 8.1-8.2** | Develop a full-service salon with services and pricing to offer to potential clients, following all state laws and licensing regulations.

Course Description

Cosmetology IV is the capstone course in the *Cosmetology* program of study intended to prepare students for careers in cosmetology by developing an understanding and practical skills in efficient and safe work practices, career and business analysis, advanced hair techniques and chemical services, and state board theoretical and practical application. Proficient students will have applied the full range of knowledge and skills acquired in this program of study toward experiences in practical applications of cosmetology practices as approved by the instructor. Laboratory facilities

and experiences simulate those found in the cosmetology industry. Upon completion and acquisition of 1500 hours, students are eligible to take the Tennessee Board of Cosmetology Examination to attain a Tennessee Cosmetology License.

Recommended Credit

If offering *Cosmetology III* for 1 credit, follow Option A (theoretical standards). If the offering the course for 2 credits, follow Option B (theoretical and practical standards). If all standards in the course are covered, the course is recommended for two credits.

1 Credit – Option A

Content	Standards
Career Exploration	1.1, 1.2
Safety, Sanitation, & Efficient Work Practices	2.1
Advanced Properties and Procedures for Hair	4.2, 4.4, 4.7
Advanced Techniques in Chemical Services	5.2, 5.3
State Board Theoretical & Practical Application	7.1
Cosmetology Career and Business Analysis	8.1, 8.2

2 Credits – Option B

Credit	Standards
Career Exploration	1.1, 1.2
Safety, Sanitation, & Efficient Work Practices	2.1, 2.2
Advanced Procedures for Nails	3.1
Advanced Properties and Procedures for Hair	4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7
Advanced Techniques in Chemical Services	5.1, 5.2, 5.3
Advanced Techniques in Skin Care	6.1
State Board Theoretical & Practical Application	7.1, 7.2
Cosmetology Career and Business Analysis	8.1, 8.2

Course Standards

1. **Career Exploration**

   1.1 <u>Graduation Plan</u>: Select a **cosmetology pathway** such as cosmetology. Other examples may include natural hair stylists, manicurists, or estheticians. Develop a **personal graduation plan** that includes steps to transition into postsecondary, salon, or other cosmetology services. Explain the steps it will take to prepare for and pass certification to become licensed in the cosmetology field.

   1.2 <u>Professional Resume</u>: Discuss what is typically included in the **resumes** of professionals. Compare and contrast several examples and create a personal resume modeled after elements identified in the search. Research **potential employers,** write a **cover letter** for the specific career focus that is the best match for your skills for success, and organize your **portfolio for employment**. Practice the **interview process** using the employment portfolio.

2. **Safety, Sanitation, and Efficient Work Practices**

    2.1 <u>Personal, Client, and Salon Safety</u>: Use Occupational Safety and Health Administration (OSHA) guidelines, Environmental Protection Agency (EPA) guidelines, and state and national code requirements to identify **risks of illness, communicable diseases, and injuries in the salon**. Identify **practices for safe working conditions** giving rationales for each. Complete an instructor-made **safety test** with 100% accuracy and demonstrate proficiency on the pre-exam setup and disinfection portion of the state board exam.

    2.2 <u>Posture and Body Mechanics</u>: Demonstrate **appropriate cosmetology posture and body positions** while completing advanced haircutting and hairstyling techniques using the elements and principles of design.

3. **Advanced Procedures for Nails**

    3.1 <u>Advanced Nail Techniques</u>: Demonstrate proficiency in **advanced nail techniques,** such as nail art, gel enhancements, and sculptured nails.
        a. Observe and identify skin and nail diseases and disorders prior to nail services and refer the client to a doctor or use appropriate techniques.
        b. Use proper disinfection techniques and infection control practices throughout the performance of nail care services using the appropriate EPA-mandated and registered products.
        c. Demonstrate and explain problem-solving techniques in nail art & extension design work.

4. **Advanced Properties and Procedures for Hair**

    4.1 <u>Advanced Hair Techniques</u>: Demonstrate **proficiency in advanced hair techniques**, such as haircutting, chemical services, and natural hair styling.

    4.2 <u>Hair and Scalp Diseases</u>: Observe and identify **hair and scalp diseases and/or disorders** following **safety and sanitation procedures**. Refer clients to doctors and/or use recommended techniques when appropriate.

    4.3 <u>Proper Disinfection</u>: Use proper **disinfection techniques and infection control practices** throughout the performance of hair care services using the appropriate EPA-mandated and registered products.

    4.4 <u>Problem-Solving</u>: Demonstrate and explain **problem-solving techniques in advanced hair design and shaping.**

    4.5 <u>Hair Removal</u>: Employ safe and sanitary **hair removal procedures**.

4.6 Texturizing: Exhibit and explain the difference in **texturizing techniques**.

4.7 Braiding and Extensions: Demonstrate different **braiding and braiding extension techniques, materials in extensions, and implements** used in braiding.
   a. Analyze the correlation between braiding techniques and a client's hair type and texture, scalp condition, curl configuration, scalp abrasions, and hair thinning or balding.
   b. Classify textured sets and styles used in braiding natural curly hair.
   c. Demonstrate understanding of all braiding and braiding extension techniques.
   d. Demonstrate and explain problem-solving techniques in extension design work.

5. Advanced Techniques in Chemical Services

5.1 Consultation, Hair Analysis, and Chemical Service: Perform an effective **consultation, hair analysis, and chemical texture service** for a client. Evaluate the positive and negative outcomes of the consultation, analysis, and chemical texture service. Analyze concepts related to chemical texture services to demonstrate the following while adhering to all directions and safety procedures:
   a. perm techniques,
   b. hair relaxing techniques, and
   c. curl re-forming (soft curl permanents).

5.2 Hair Coloring Techniques: Evaluate concepts related to **advanced hair coloring techniques** and demonstrate **proper procedures** while adhering to all **directions and safety procedures**.

5.3 Special Challenges in Hair Color and Corrective Solutions: Investigate and apply **problem-solving techniques** for special challenges in specific hair colors and corrective solutions. Discuss effective color correction, gray hair, damaged hair, red hair color, brunettes, blondes, and other special conditions.

6. Advanced Techniques in Skin Care

6.1 Skin Care Techniques: Demonstrate proficiency in **advanced skin care techniques**, such as facials, manipulations, and makeup application. Observe and identify **skin and facial diseases and/or disorders** following **safety and sanitation procedures.** Refer clients to doctors and/or use recommended techniques when appropriate.

7. State Board Theoretical and Practical Application

7.1 State Board Theory Exam: Demonstrate a thorough understanding of the following **Tennessee Board of Cosmetology Theoretical topics** to prepare for the theory portion of the Tennessee Board of Cosmetology exam:
   a. safety and infection control;

b. client consultation;
c. hair, scalp, skin, and nail analysis;
d. hairstyling;
e. chemical services;
f. skin care;
g. makeup;
h. hair removal; and
i. nails.

7.2 <u>State Board Practical Exam</u>: Practice and perform the **skills and procedures** listed in the current **Tennessee Cosmetology Practical Exam Candidate Information Bulletin,** adhering to the state-mandated time. Include the skills and procedures in the following areas:
a. workstation preparation,
b. haircutting,
c. chemical wave,
d. foil highlights,
e. hydroxide virgin relaxer,
f. hair color retouch,
g. blow dry and thermal,
h. basic facial,
i. eyebrow waxing and tweezing,
j. nail enhancement using a form, and
k. end-of-day clean-up.

8. Cosmetology Career and Business Analysis

8.1 <u>State Laws and Licensing</u>: Research and summarize all **state laws** and **licensing procedures in the cosmetology field**, including but not limited to the cosmetologist license, specialist license, salon license, instructor license, and cosmetology school license.

8.2 <u>Cosmetology Business and Services</u>: Work in a team to identify local area businesses and other entities that provide cosmetology services. Conduct phone or face-to-face interviews with a business to find out the specific services offered, fee structure, location(s) and hours, contact information and other information people seeking such services might require. As a class, compile a referral guide to **cosmetology services in your area**. Cosmetology services might include, but are not limited to, the following:
a. haircutting,
b. coloring,
c. hair styling,
d. manicures and pedicures,
e. shampoo and conditioning,
f. chemical texture services,

g. waxing, and
h. applying makeup or eyelashes.

Standards Alignment Notes

*References to other standards include:
- P21: Partnership for 21st Century Skills [Framework for 21st Century Learning](#)
  - Note: While not all standards are specifically aligned, teachers will find the framework helpful for setting expectations for student behavior in their classroom and practicing specific career readiness skills.

Barbering I

Primary Career Cluster:	Human Services
Course Contact:	CTE.Standards@tn.gov
Course Code:	C19H09
Prerequisite:	None
Credit:	1
Grade Level(s):	9-10
Student-Teacher Ratio:	15:1 (TCA 62-3-123)
Elective Focus - Graduation Requirements:	This course satisfies one of three credits required for an elective focus when taken in conjunction with other Human Services courses.
Program of Study (POS) Concentrator:	This course satisfies one out of two required courses to meet the Perkins V concentrator definition when taken in sequence in the approved program of study.
Programs of Study and Sequence:	This is the Year 1 course in the *Barbering* program of study.
Aligned Student Organization:	SkillsUSA: https://www.skillsusatn.org
Coordinating Work-Based Learning:	Teachers are encouraged to use embedded WBL activities such as informational interviewing, job shadowing, and career mentoring. For information, visit https://www.tn.gov/education/educators/career-and-technical-education/work-based-learning.html.
Promoted Tennessee Student Industry Credentials:	Credentials are aligned with postsecondary and employment opportunities and with the competencies and skills that students acquire through their selected program of study. For a listing of promoted student industry credentials, visit https://www.tn.gov/education/educators/career-and-technical-education/student-industry-certification.html.
Teacher Endorsement(s):	560, 780
Required Teacher Certifications:	Tennessee Master Barber License and Tennessee Barber Instructor License Please refer to Occupational Educator Licensure Guidance for a full list.
Required Teacher Training:	None
Teacher Resources:	https://www.tn.gov/education/educators/career-and-technical-education/career-clusters/cte-cluster-human-services.html Best for All Central: https://bestforall.tnedu.gov

Course at a Glance

CTE courses provide students with an opportunity to develop specific academic, technical, and 21st-century skills necessary to be successful in careers and life. In pursuit of ensuring every student in Tennessee achieves this level of success, we begin with rigorous course standards that feed into intentionally designed programs of study.

Students engage in industry-relevant content through general education integration and experiences such as career and technical student organizations (CTSO) and work-based learning (WBL). Through these experiences, students are immersed with industry-standard content and technology, solve industry-based problems, meaningfully interact with industry professionals, and use/produce industry-specific, informational texts.

Using a Career and Technical Student Organization (CTSO) in Your Classroom
CTSOs are a great resource to put classroom learning into real-life experiences for students through classroom, regional, state, and national competitions, and leadership opportunities. Below are CTSO connections for this course; note this is not an exhaustive list.
- Participate in the CTSO Fall Leadership Conference to engage with peers by demonstrating logical thought processes and developing industry-specific skills that involve teamwork and project management.
- Participate in contests that highlight job skill demonstrations, interviewing skills, community service activities, extemporaneous speaking, and job interviews.
- Participate in leadership activities such as Student2Student Mentoring, National Week of Service, Officer Training, and Community Action Project.

Using Work-Based Learning (WBL) in Your Classroom
Sustained and coordinated activities related to the course content are the key to successful work-based learning. Possible activities for this course include the following; note this is not an exhaustive list.
- **Standards 1.1-2.4** | Interview a licensed barber to learn more about the profession and the pathways to pursue for all areas of the profession.
- **Standards 3.1-4.3** | Complete a safety inspection of hair stations to show the mastery of safety, sanitation, and efficient work practices. Provide recommendations to improve work areas.
- **Standards 5.1-6.2** | Perform proper hair and nail care on potential clients.
- **Standard 7.1** | Using the data analysis information, create a business based on the needs of your region.

Course Description

Barbering I is the foundational level of the *Barbering* program of study. This course prepares students with work-related skills for advancement into the Barbering II course. Content provides students the opportunity to acquire fundamental skills in both theory and practical applications of leadership and interpersonal skill development. Content stresses safety, environmental issues, and protection of the public and designers as integrated with principles of haircutting, skin, nails, scalp

care, chemicals, and barbershop management. Laboratory facilities and experiences simulate those found in the barbering industry. Upon completion and acquisition of 340 hours, students are eligible to take the Tennessee Board of Cosmetology and Barbering Examination for a Tennessee Barbering Technician License.

Course Standards

1. **History and Influences of the Barbering Industry**

   1.1 <u>History of Barbering</u>: Research **historical and significant milestones** that influenced barbering changes from the beginning of civilization to the present. Identify **significant time periods and major impacts of the barbering trends** on the progression of various styles and progression of tools and equipment.

   1.2 <u>History of Techniques</u>: Identify and compare **ancient methods that have evolved into techniques being used today**. Compare and contrast the dramatic changes in cosmetics, hairstyles, and treatments.

   1.3 <u>Influential Beauty Industry Professionals</u>: Research and identify the **contributions of major influential individuals** (historical and current professionals) **of the professional beauty industry** and align their contributions with current beauty trends. Examples of significant contributors include, but are not limited to, the following:
       a. Greg Zorian,
       b. Sofie Pok,
       c. Jeff The Master Barber, and
       d. William T. Johnson.

2. **Barbering Career Exploration**

   2.1 <u>Career Pathways</u>: Analyze **career pathways within the barbering program of study**. Use multiple sources, such as local job postings and Tennessee Department of Labor and Workforce Development data, to describe the **education requirements, job availability, salaries, and benefits**. Careers may include the following:
       a. barber stylist,
       b. master barber,
       c. barber educator,
       d. barber shop owner,
       e. barber product developer,
       f. barber consultant,
       g. celebrity barber,
       h. state board examiner, and
       i. photo/movie/theatre stylist.

2.2 <u>Personal Characteristics and Aptitudes</u>: Describe **personal characteristics and aptitudes**, including 21st-century skills, needed by barbers. Create a rubric for self-assessing 21st-century skills and use it to evaluate course assignments and personal work. Examples include the following:
   a. communicate verbally and nonverbally in a respectful manner with clients and coworkers;
   b. work effectively in teams and resolve conflicts when necessary;
   c. demonstrate a positive work ethic;
   d. understand different cultures and their impact on design and hairstyles;
   e. adapt to changes; and
   f. manage time and resources wisely.

2.3 <u>Career and Technical Student Organization Introduction</u>: Introduce the program's aligned **Career and Technical Student Organization** (CTSO), **SkillsUSA**, through an interactive activity, such as a classroom competition.

2.4 <u>Ethical Artificial Intelligence (AI)</u>: **Explore the ethical implications of AI usage** through interactive discussions and case studies, learning to identify bias, ensure fairness, and protect privacy in AI systems. **Develop** critical thinking **skills to evaluate the societal impact of AI technologies**, while fostering a sense of responsibility and ethical decision-making in the use of AI tools.

3. Barbering State Laws and Licensure

3.1 <u>Barbering Laws and Licensing</u>: Gather research and analyze information from the **Tennessee Department of Commerce and Insurance-Cosmetology** and **Barber Examiners** to explain important connections to the following:
   a. sanitation, disinfection, and safety laws, such as cleaning and disinfecting of implements and equipment;
   b. cleaning and disinfecting the work environment, sanitary procedures, and pathogens;
   c. licensing, certification, and industry credentialing requirements; and
   d. legal responsibilities, behaviors, and practices/procedures (ethical vs. unethical, legal vs. illegal).

4. Safety, Sanitation, and Efficient Work Practices

4.1 <u>Emergencies and Procedures</u>: Define and differentiate possible **emergencies and emergency procedures**, such as universal precautions and blood exposure. Identify **decontamination procedures** to ensure the safety of the client and/or peers in the classroom and laboratory.

4.2 <u>Chemical Safety</u>: Demonstrate proper **set-up and operation of equipment and utilization of materials** by mixing disinfectants in appropriate proportions according to the manufacturer's instructions. Complete training to receive certification for **mixing disinfectants** such as Barbicide. Clean and maintain implements by using appropriately

mixed chemicals and follow procedures for **decontamination of tools** in accordance with **Occupational Safety and Health Administration (OSHA) and Environmental Protection Agency (EPA) guidelines**.

4.3 <u>Sanitation Procedures</u>: Practice and critique procedures for maintaining a **safe and sanitary environment** for clients present in a cosmetology facility.
   a. Evaluate government agencies that ensure safety and sanitation for the cosmetology industry.
   b. Identify pathogens common to the salon setting.
   c. Demonstrate proper sanitation and disinfection for the salon to prevent illness, communicable diseases, and injuries.
   d. Complete an instructor-made safety test with 100 percent accuracy.

5. **Properties and Procedures for Hair**

5.1 <u>Anatomy and Physiology of the Hair</u>: Describe, identify, and analyze **the functions, structures, diseases, and disorders of hair**.
   a. Explain the structures of the hair root and hair shaft.
   b. Identify and evaluate the following: growth cycles of the hair, hair loss causes and treatments, hair disorders, and scalp disorders.

5.2 <u>Properties of Hair and Scalp</u>: Apply concepts related to the **properties of the hair and scalp physiology** to perform a **hair and scalp analysis**, including the following factors: texture, density, porosity, elasticity, hair growth patterns, and dry or oily hair and scalp.

5.3 <u>Properties of Hair Design</u>: Demonstrate concepts related to the **properties of hair design** to apply the following:
   a. define and give examples of the elements of hair design;
   b. identify, define, and give examples of the principles of hair design;
   c. recognize and explain the importance and influence of hair type and texture to a client's hairstyle;
   d. define and explain the changes that influence hairstyles with different combinations of hair types and textures;
   e. critique each facial shape to devise the best hairstyle for each, explaining the purpose for each hairstyle as it relates to the facial shapes and hair properties; and
   f. perform a client consultation for any given hair service.

5.4 <u>Proper Scalp Care</u>: Demonstrate or explain the techniques and benefits used in **proper scalp care, shampooing, conditioning, and draping** as it relates to the following:
   a. massage and specialized treatments,
   b. hair brushing,
   c. shampoo and conditioning services, and
   d. professional draping.

5.5 Basic Hairstyling and Implements: Identify, describe, and effectively demonstrate basic **hairstyling techniques** and **manipulating implements** appropriately, including the following:
   a. sectioning,
   b. wet hairstyling,
   c. roller curls,
   d. comb-out techniques,
   e. thermal hairstyling, and
   f. braiding.

6. **Properties and Procedures for Skin and Nails**

6.1 Anatomy and Physiology of the Skin and Nails: Describe and identify the **structures, functions, diseases, and disorders of skin and nails**.

6.2 Hand, Nail, and Skin Analysis: Perform a hand, nail, and skin analysis for a client. Use **sanitary and safety precautions** necessary for procedures, including proper **decontamination and infection control procedures**. Demonstrate proper **use of implements and equipment** for manicure and pedicure procedures.

7. **Data Analysis**

7.1 Data Analysis in Human Services: Research the **use of data in Human Service** career fields. Include data that is generated internally by businesses, and externally by local communities, state, and the nation. Explore examples of how the data is used, including the following:
   a. customer/client use of products and services;
   b. demographics of end users;
   c. community, state, and national statistics; and
   d. data that must be reported to another entity.

Standards Alignment Notes

*References to other standards include:
- P21: Partnership for 21st Century Skills [Framework for 21st Century Learning](#)
  - Note: While not all standards are specifically aligned, teachers will find the framework helpful for setting expectations for student behavior in their classroom and practicing specific career readiness skills.

Barbering II

Primary Career Cluster:	Human Services
Course Contact:	CTE.Standards@tn.gov
Course Code:	C19H10
Prerequisite:	*Barbering I* (C10H09)
Credit:	1
Grade Level(s):	10-11
Student-Teacher Ratio:	15:1 (TCA 62-3-123)
Elective Focus - Graduation Requirements:	This course satisfies one of three credits required for an elective focus when taken in conjunction with other Human Services courses.
Program of Study (POS) Concentrator:	This course satisfies one out of two required courses to meet the Perkins V concentrator definition when taken in sequence in the approved program of study.
Programs of Study and Sequence:	This is the Year 2 course in the *Barbering* program of study.
Aligned Student Organization:	SkillsUSA: https://www.skillsusatn.org/
Coordinating Work-Based Learning:	Teachers are encouraged to use embedded WBL activities such as informational interviewing, job shadowing, and career mentoring. For information, visit https://www.tn.gov/education/educators/career-and-technical-education/work-based-learning.html.
Promoted Tennessee Student Industry Credentials:	Credentials are aligned with postsecondary and employment opportunities and with the competencies and skills that students acquire through their selected program of study. For a listing of promoted student industry credentials, visit https://www.tn.gov/education/educators/career-and-technical-education/student-industry-certification.html.
Teacher Endorsement(s):	560, 780
Required Teacher Certifications:	Tennessee Master Barber License and Tennessee Barber Instructor License Please refer to Occupational Educator Licensure Guidance for a full list.
Required Teacher Training:	None
Teacher Resources:	https://www.tn.gov/education/educators/career-and-technical-education/career-clusters/cte-cluster-human-services.html Best for All Central: https://bestforall.tnedu.gov

Course at a Glance

CTE courses provide students with an opportunity to develop specific academic, technical, and 21st-century skills necessary to be successful in careers and life. In pursuit of ensuring every student in Tennessee achieves this level of success, we begin with rigorous course standards that feed into intentionally designed programs of study.

Students engage in industry-relevant content through general education integration and experiences such as career and technical student organizations (CTSO) and work-based learning (WBL). Through these experiences, students are immersed with industry-standard content and technology, solve industry-based problems, meaningfully interact with industry professionals, and use/produce industry-specific, informational texts.

Using a Career and Technical Student Organization (CTSO) in Your Classroom

CTSOs are a great resource to put classroom learning into real-life experiences for students through classroom, regional, state, and national competitions, and leadership opportunities. Below are CTSO connections for this course; note this is not an exhaustive list.

- Participate in the CTSO Fall Leadership Conference to engage with peers by demonstrating logical thought processes and developing industry-specific skills that involve teamwork and project management.
- Participate in contests that highlight job skill demonstration, interviewing skills, community service activities, extemporaneous speaking, and job interviews.
- Participate in leadership activities such as Student2Student Mentoring, National Week of Service, Officer Training, and Community Action Project.

Using Work-Based Learning (WBL) in Your Classroom

Sustained and coordinated activities related to the course content are the key to successful work-based learning. Possible activities for this course include the following. This is not an exhaustive list.

- **Standard 1.1** | Interview local postsecondary instructors to learn more about opportunities upon secondary graduation.
- **Standards 2.1-2.3** | Perform mock sanitation inspections on the workstations of other classmates, providing recommendations on how to improve compliance with regulations.
- **Standards 3.1-3.2** |Create a visual aid to illustrate the varying anatomical responses to provided services from the service provider.
- **Standards 4.1-7.3** |Under the supervision of the instructor, provide skin, hairstyling, and haircutting services to potential volunteer clients.
- **Standards 8.1-9.3** | Demonstrate the varying chemical services and mastery of standards on class mannequins.
- **Standards 10.1-10.2** |Using the business startup process and following the barbering laws, create an informational artifact that explains the business ownership for the state of Tennessee.

Course Description

Barbering II is the Year 2 course of the *Barbering* program of study and prepares students for work-related skills and advancement into Barbering III. Content provides students the opportunity to acquire knowledge and skills in both theory and practical application. Advanced knowledge and skills in hair design, hair cutting, shaving, nail care, and cosmetic applications will be enhanced in a laboratory setting, which duplicates industry standards. Upon completion and acquisition of 340 hours, students are eligible to take the Tennessee Board of Cosmetology and Barbering Examination for a Tennessee Barbering Technician License.

Course Standards

1. **Barbering Career Readiness**

   1.1 Postsecondary Education: Research and assess **apprenticeships and postsecondary institutions** (colleges of applied technology, community colleges, and four-year universities) in Tennessee and other states that offer **barbering-related programs**. Evaluate each **license** that is attainable in the barbering field. Develop a **career pathway** plan outlining academic and career achievement goals and objectives.

2. **Safety, Sanitation, and Efficient Work Practices**

   2.1 Sanitation Procedures: Practice and critique procedures for maintaining a **safe and sanitary environment** for clients present in a barbering facility.
      a. Evaluate government agencies that ensure safety and sanitation for the barbering industry.
      b. Identify pathogens common to the salon setting.
      c. Demonstrate proper sanitation and disinfection for the salon to prevent illness, communicable diseases, and injuries.
      d. Complete an instructor-made safety test with 100 percent accuracy.
      e. Clean and maintain implements by using appropriately mixed chemicals and follow procedures for decontamination of tools in accordance with Occupational Safety and Health Administration (OSHA) and Environmental Protection Agency (EPA) guidelines.

   2.2 Chemical Safety: Demonstrate proper **set-up and operation of equipment and utilization of materials** by mixing disinfectants in appropriate proportions according to the manufacturer's instructions. Complete training to receive certification for **mixing disinfectants** such as Barbicide. Clean and maintain implements by using appropriately mixed chemicals and follow procedures for **decontamination of tools** in accordance with **OSHA and EPA guidelines.**

2.3   Equipment and Back Safety: Demonstrate and explain the **rationale** behind the following
safety concepts:
   a.   demonstrate proper posture and body positions during haircutting procedures;
   b.   demonstrate proper set-up and operation of equipment; and
   c.   differentiate the nature of electricity and electric currents and describe the
        relationship of electric currents to the electromagnetic spectrum as it pertains to
        electrical safety.

3. Anatomical Response to Services

3.1   Anatomy Structure and Function: Summarize the different **functions, structures,
diseases, and disorders of hair, skin, and nails**, and explain how to properly care for hair,
skin, and nails through cleanliness, nutrition, and healthful living.

3.3   Response to Treatments and Services: Compare and contrast how a **client's hair, skin, and
nail anatomy reacts to various treatments and services**. Explain why recognizing the
differences between **normal and abnormal anatomy** is important in determining whether
specific treatments and services are appropriate.

4. Skin Procedures

4.1   Proper Skin Procedures: Demonstrate **proper skin procedures**:
   a.   evaluate the muscular and skeletal anatomy of the head/cranium,
   b.   demonstrate a skin care service client consultation,
   c.   demonstrate a wax service,
   d.   demonstrate the basic make-up application, and
   e.   demonstrate a facial with and without cleansing with ionization.

5. Hair Styling Procedures

5.1   Proper Hair Procedures: Differentiate and demonstrate the proper **techniques used in
scalp care, shampooing, conditioning, and draping**, including head massage and
specialized treatments, hair brushing, shampoo and conditioning services, and sectioning.

5.2   Hairstyling Techniques and Implements: Identify, describe, and effectively demonstrate
hairstyling techniques and manipulating implements appropriately, including the
following:
   a.   advanced hairstyling techniques,
   b.   advanced braiding,
   c.   sectioning,
   d.   wet hairstyling,
   e.   roller curls,
   f.   comb-out techniques, and
   g.   thermal hairstyling

5.3 <u>Wig Care</u>: Evaluate different types of **wigs** and demonstrate **proper care and storage.**

5.4 <u>Natural Hair Care Services</u>: Demonstrate **basic natural hair care services** to include, but not limited to, the following:
- a. extensions,
- b. braiding,
- c. twisting,
- d. wefts, and
- e. locks.

6. Haircutting Procedures

6.1 <u>Principles of Haircuts</u>: Incorporating **geometric principles**, identify and analyze the purpose and interrelationships related to **various haircuts**.
- a. Compare and contrast head form and reference points used in the basic principles of haircutting.
- b. Compare or contrast balance and consistency related to techniques using the razor, shears, or clippers.
- c. Explain and demonstrate the purpose and importance of safety precautions and holding techniques when using various hair-cutting tools (razor, shears, clippers, or thinning shears).

6.2 <u>Haircutting Basics</u>: Compare and contrast **lines, angles, and elevation** related to **basic principles of hair cutting** when performing and creating various haircuts that incorporate the following:
- a. uniform layered haircut using 90° elevation,
- b. long layered haircut using 180° elevation,
- c. graduated haircut using 45° elevation, and
- d. blunt haircut using 0° elevation.

6.3 <u>Haircutting Terms</u>: Research and describe the use of the following **hair-cutting terms** based on an effective mock **client consultation** incorporating face shape and hair analysis that relate to the following:
- a. lines,
- b. sections,
- c. angles,
- d. elevation,
- e. guideline or design line,
- f. over direction,
- g. head form, and
- h. reference points.

7. **Chemical Services: Texture**

   7.1 Chemical Composition of Hair: Analyze and illustrate the **chemical composition of the hair** including side bonds of the cortex, hair pigment, wave pattern, and curly hair.

   7.2 Waving Service Consultation: Demonstrate a **client consultation for permanent waving service.**

   7.3 Chemical Structure of the Hair: Evaluate the **chemical structure and pH of hair** and differentiate between the **chemical texture services** based on how each service affects the **structure and pH of the hair**, including distinguishing factors between **hydrogen and disulfide bonds.**

8. **Chemical Services: Color**

   8.1 Chemistry of Hair Coloring: Examine the roles of organic and inorganic chemistry, different states of matter, oxidation-reduction reactions, and pure substances and physical mixtures as they relate to hair color. Identify and analyze the **formulation of hair color** in relation to **hair properties**. Define and analyze the **classification of hair coloring and lightening** and give reasons clients color their hair.

   8.2 Hair Coloring Developers and Lighteners: Evaluate **chemicals used in the hair coloring process** including developers and lighteners.
      a. Explain melanin's role in the hair coloring process.
      b. Explain the role of hydrogen peroxide in hair color formulas.
      c. Compare and contrast lightener processes.

   8.3 Color Theory: Analyze the **color wheel** and apply concepts of **color theory** to the development of hair color. Identify techniques that achieve desired hues, values, and intensities. Demonstrate the ability to **color mix in various color systems**, including color corrections.

9. **Salon Ownership**

   9.1 Business Startup Process: Describe **key components of the barbering business startup process** (the entrepreneur, the environment, the opportunity, startup resources, and state laws, regulations, and legal responsibilities). Explain each component and identify the **risks and rewards**, highlighting the advantages and disadvantages of owning a business versus working for someone else.

   9.2 Barbering Law: Research and summarize all **state laws and licensing procedures** in the barbering field, including but not limited to the barbering license, specialist license, salon license, instructor license, and barbering school license.

10. Team Project

10.1 <u>Team Project with Data Analysis</u>: As a team, **identify a problem** related to the program of study as a whole. **Research and utilize the Engineering Design Process** to design a solution. Document the following steps in an engineering design notebook for inclusion in the program portfolio. When possible, connect the problem to an existing SkillsUSA event.

    a. **Problem Identification**: Brainstorm specific problems and challenges within the program of study. Conduct basic research to understand the scope and implications of the identified problem. Identify one problem as a focus area.

    b. **Research and Analysis**: Conduct in-depth research on chosen topics related to the problem. Locate and analyze a dataset related to the problem.

    c. **Review the Stages of the Engineering Design Process**: Define the problem, research, brainstorm solutions, develop prototypes, test and evaluate, and iterate. Consider constraints such as cost, efficiency, and environmental impact during the design process.

    d. **Project Implementation**: Assign specific roles within the design teams (e.g., project manager, researcher, designer, tester). Design a solution tailored to address the identified problem or scenario. Document progress through design journals, sketches, diagrams, and digital presentations. (Note: Prototype is optional in the Year 2 course.)

    e. **Presentation and Reflection**: Showcase the problem and solution to the class. Share the data that was analyzed and how it affected the solution. Discuss the design process and challenges. As a class, critically evaluate the effectiveness and feasibility of the solutions and propose potential improvements.

Standards Alignment Notes

*References to other standards include:
- P21: Partnership for 21st Century Skills [Framework for 21st Century Learning](#)
  - Note: While not all standards are specifically aligned, teachers will find the framework helpful for setting expectations for student behavior in their classroom and practicing specific career readiness skills.

Barbering III

Primary Career Cluster:	Human Services
Course Contact:	CTE.Standards@tn.gov
Course Code:	C19H11
Prerequisite(s):	*Barbering I* (C19H09), *Barbering II* (C19H10)
Credit:	1
Student-Teacher Ratio:	15:1 (TCA 62-3-123)
Grade Level(s):	11-12
Elective Focus - Graduation Requirements:	This course satisfies one of three credits required for an elective focus when taken in conjunction with other Human Services courses.
Program of Study (POS) Concentrator:	This course satisfies one out of two required courses to meet the Perkins V concentrator definition when taken in sequence in the approved program of study.
Programs of Study and Sequence:	This is the Year 3 course in the *Barbering* program of study.
Aligned Student Organization:	SkillsUSA: https://www.skillsusatn.org/
Coordinating Work-Based Learning:	Teachers are encouraged to use embedded WBL activities such as informational interviewing, job shadowing, and career mentoring. For information, visit https://www.tn.gov/education/educators/career-and-technical-education/work-based-learning.html.
Promoted Tennessee Student Industry Credentials:	Credentials are aligned with postsecondary and employment opportunities and with the competencies and skills that students acquire through their selected program of study. For a listing of promoted student industry credentials, visit https://www.tn.gov/education/educators/career-and-technical-education/student-industry-certification.html.
Teacher Endorsement(s):	560, 780
Required Teacher Certifications:	Tennessee Master Barber License and Tennessee Barber Instructor License Please refer to Occupational Educator Licensure Guidance for a full list.
Required Teacher Training:	None
Teacher Resources:	https://www.tn.gov/education/educators/career-and-technical-education/career-clusters/cte-cluster-human-services.html Best for All Central: https://bestforall.tnedu.gov

Course at a Glance

CTE courses provide students with an opportunity to develop specific academic, technical, and 21st-century skills necessary to be successful in careers and life. In pursuit of ensuring every student in Tennessee achieves this level of success, we begin with rigorous course standards that feed into intentionally designed programs of study.

Students engage in industry-relevant content through general education integration and experiences such as career and technical student organizations (CTSO) and work-based learning (WBL). Through these experiences, students are immersed with industry-standard content and technology, solve industry-based problems, meaningfully interact with industry professionals, and use/produce industry-specific, informational texts.

Using a Career and Technical Student Organization (CTSO) in Your Classroom

CTSOs are a great resource to put classroom learning into real-life experiences for your students through classroom, regional, state, and national competitions, and leadership opportunities. Below are CTSO connections for this course; note this is not an exhaustive list.

- Participate in the CTSO Fall Leadership Conference to engage with peers by demonstrating logical thought processes and developing industry-specific skills that involve teamwork and project management.
- Participate in contests that highlight job skill demonstration, interviewing skills, community service activities, extemporaneous speaking, and job interviews.
- Participate in leadership activities such as Student2Student Mentoring, National Week of Service, Officer Training, and Community Action Project.

Using Work-Based Learning (WBL) in Your Classroom

Sustained and coordinated activities that relate to the course content are the key to successful work-based learning. Possible activities for this course include the following; note this is not an exhaustive list.

- **Standards 1.1** | Create an informational artifact highlighting the career pathways in the barbering field that are in demand in Tennessee.
- **Standards 2.1-2.3** | Interview a salon owner to discuss the safety, sanitation, and efficient work practices that are used within their business.
- **Standards 3.1-3.2** | Research the various ways that hair, skin, and nails respond to treatments and services, presenting your gathered information to local salon owners.
- **Standards 4.1-5.3** | Demonstrate advanced skills for hair and chemical services to potential clients.
- **Standards 6.1-6.4** | Demonstrate mastery of facial and skin care techniques through services to potential clients.
- **Standards 7.1-7.4** | Form a business plan to develop a start-up salon in your area, utilizing regional data to project the needs of potential customers.

Course Description

Barbering III is the advanced level of Barbering, and it prepares students with work-related services for employment and entrepreneurship in the barbering field. Content provides students the opportunity to acquire foundation skills in both theory and practical applications. Advanced knowledge and skills in haircutting, scalp care, chemical, and barbershop management, which duplicates barbering industry standards. Laboratory facilities and experiences will be used to simulate those found in the barbering industry. Upon completion and acquisition of 1500 hours, students are eligible to take the Tennessee Board of Barbering examination for a Tennessee Master Barbering License, or upon the completion or acquisition of 340 hours, students are eligible to take the Tennessee Board of Cosmetology and Barbering Examination for a Tennessee Barbering Technician License.

Course Standards

1. **Barbering Career Application**

   1.1 Barbering Career Pathways: Explore and evaluate **career pathways** in the field of **barbering**.

2. **Safety, Sanitation, and Efficient Work Practices**

   2.1 Salon Safety: Identify **safety hazards** and demonstrate **practices for safe working conditions**. Evaluate **government agencies** and **government-approved agencies** that ensure **safety and sanitation** for the barbering industry such as Occupational Safety and Health Administration (OSHA) and Underwriters Laboratories. Identify guidelines that prevent illness, injury, and disease and implement salon safety practices. Safety hazards may include fire, electrical, chemical, and infection.

   2.2 Sanitation and Disinfection: Demonstrate proper **sanitation and disinfection** for the salon and explain the rationale behind each of the following concepts:
      a. identify appropriate disinfection chemicals,
      b. proper mixing of disinfection chemicals in appropriate proportions according to manufacturer's instructions, and
      c. proper equipment and tool disinfection.

   2.3 Blood Exposure: Simulate **blood exposure** procedures on a minor mock cut or abrasion properly disposing of waste material.

3. Anatomical Response to Services

3.1 <u>Anatomy Structure and Function</u>: Summarize the different **functions, structures, and diseases and disorders of hair, skin, and nails**, how to **properly care for hair, skin, and nails** through cleanliness, nutrition, and healthful living.

3.2 <u>Response to Treatments and Services</u>: Compare and contrast how a client's **hair, skin, and nail anatomy reacts to various treatments and services**. Explain why recognizing the **differences between normal and abnormal anatomy** is important in **determining whether specific treatments and services are appropriate.**

4. Advanced Properties and Procedures for Hair

4.1 <u>Customizing Techniques and Instruments to Client's Hair</u>: Demonstrate and explain the **rationale behind each of the following concepts**:
   a. Determine the risks and benefits of using specific techniques in the evaluation of clients' hair, including the following:
      i. scalp care,
      ii. shampooing,
      iii. conditioning,
      iv. draping,
      v. sectioning, and
      vi. specialized treatments.
   b. Explain the decisions behind the selection and maintenance of implements.

4.2 <u>Hairstyling Techniques</u>: Effectively demonstrate advanced **hairstyling techniques** and explain how the **elements and principles of design** are incorporated.

4.3 <u>Advanced Haircutting Techniques</u>: Identify, describe, and effectively demonstrate **advanced haircutting techniques** while **employing implements appropriately** and using proper posture and body positions:
   a. perform haircuts using guides (stationary, traveling, and combination),
   b. razor cutting,
   c. slide cutting,
   d. shears-over-comb,
   e. traveling guide haircut,
   f. whole head blending, and
   g. various weight line haircut designs.

4.4 <u>Wig and Hair Enhancements</u>: Research and summarize the rationale for barbers to study **wig and hair enhancements**. Include the following discussion topics: the **differences between human hair and synthetic hair and categories of wigs and hairpieces** and their uses. Provide **styling tips** for clients related to categories of wigs, hairpieces, and extensions.

4.5 <u>Extension Techniques</u>: Evaluate various **extension techniques** and **application methods**:
   a. evaluating hair and scalp,
   b. proper selection of extensions,
   c. applying/removing extensions, and
   d. braiding.

4.6 <u>Facial Hair Guidelines</u>: Follow **basic guidelines and techniques for shaving and facial hair** design, explaining the general guidelines to consider prior to performing a **facial shave**, including the following:
   a. hair type and growth factors;
   b. identify the fourteen shaving areas of the face from the standpoints of a lefthanded and righthanded barber; and
   c. demonstrate razor handling techniques based on proper body positioning, razor position, and strokes that include the following:
       i. cutting stroke,
       ii. freehand,
       iii. backhand,
       iv. reverse freehand, and
       v. reverse backhand.

4.7 <u>Shaving Preparation and Methods</u>: Describe the basic **types of shaves** and demonstrate the **preparation, shaving, and finishing methods** involved in each step listed below:
   a. second-time-over shave,
   b. once-over shave,
   c. close shave, and
   d. neck and outline shave.
   Demonstrate **grooming and shaping techniques** for beard and mustache designs.

5. Advanced Techniques in Chemical Services

5.4 <u>Chemical Texture Services</u>: Demonstrate **safe and effective concepts and procedures in chemical texture services** to perform the following while adhering to all safety processes:
   a. perm techniques,
   b. hair relaxing techniques, and
   c. curl re-forming (soft curl permanents).

5.5 <u>Hair Coloring</u>: Evaluate concepts related to **hair coloring** and demonstrate the following while adhering to all directions and safety procedures:
   a. temporary hair color,
   b. semipermanent hair color,
   c. demi-permanent hair color,
   d. single-process permanent color,
   e. double-process permanent color, and
   f. toners.

5.6 <u>Advanced Hair Coloring Techniques</u>: Investigate, analyze, and demonstrate **advanced hair coloring techniques.** Analyze, describe, and demonstrate the **methods for highlighting**, including common methods as well as **specialized methods**: **ombre and balayage**. Determine the differences between ombre and balayage.

6. Facials and Skin Care

6.3 <u>Hair Removal</u>: Investigate the features of **common hair removal methods**, including **consultation, contraindications for hair removal, permanent and temporary hair removal, and implements and materials**. Be able to outline steps to all hair removal procedures. State rationale for specific contraindications for hair removal.

6.4 <u>Facial</u>: Demonstrate proficiency in **performing a facial** while incorporating the following:
   a. inspection of electrical connections and thermostatic temperatures on steamer or vaporizer following OSHA standards;
   b. inspection of electrical equipment used to perform facial cleansing and/or massage;
   c. equipment sanitation;
   d. consultation and skin analysis;
   e. selection of skin care products and equipment;
   f. facial massage manipulations and their benefits; and
   g. contraindications that prohibit performing facial treatments, including but not limited to massage with a vibrator to stimulate blood circulation.

6.3 <u>Facials for Specific Skin Types</u>: Explain and make recommendations for performing **facials** for **specific skin types**, and give thorough **reasoning and explanation** for the **techniques, products, and/or equipment used for each treatment.**

7. Entrepreneurship in the Barbering Industry

7.1 <u>Barbering Business Startup</u>: Describe **key components of the barbering business startup process** (the entrepreneur, the environment, the opportunity, startup resources, and state laws, regulations, and legal responsibilities). Prepare an artifact to explain each component and identify the **risks and rewards,** highlighting the **advantages and disadvantages** of owning a business versus working for someone else.

7.2 <u>Labor Market Research</u>: Investigate and research local labor market data and compare **local barbering industry data** to barbering data for the U.S. economy. Differentiate between **sole proprietorship, partnership, limited liability company (LLC), and corporation**. Examine how **business cycles, economic indicators** (i.e., interest rates, inflation, and unemployment), and **free enterprise system characteristics**, such as profit motive, private property, and competition impact **business decision-making**. Research, compare, and contrast investment opportunities and compile a list of advantages and disadvantages of business ownership.

7.3 <u>Business Plan</u>: Explain the **purpose of a business plan** and list the **four major parts** typically included (business description, management plan, marketing plan, and financial plan). Describe the **importance of developing a business plan** when seeking out potential investors or lenders. In preparation for a future career as a salon owner, develop an original **business philosophy** detailing one's beliefs for how a business should be run, including a baseline budget and financial goals, money management concepts, procedures and strategies, and necessary personal characteristics of a successful entrepreneur.

7.4 <u>Business Startup Costs</u>: Research and examine **startup costs, operating costs, overhead, and personal expenses** by researching and developing a **financial statement** based on local salon models obtained from public records or business websites. Contact **local lending institutions** regarding **requirements for business loans** and **needed documentation**, such as personal income statements, tax records, credit reports, loan history, and personal investment. Prepare **financial statements, charts, and graphs** for the proposed business plan, including but not limited to the following:
   a. estimated start-up costs,
   b. projected income statement,
   c. projected balance sheet, and
   d. cash flow.

Standards Alignment Notes

*References to other standards include:
- P21: Partnership for 21st Century Skills [Framework for 21st Century Learning](#)
  - Note: While not all standards are specifically aligned, teachers will find the framework helpful for setting expectations for student behavior in their classroom and practicing specific career readiness skills.

Barbering IV

Primary Career Cluster:	Human Services
Course Contact:	CTE.Standards@tn.gov
Course Code:	TBD
Prerequisite(s):	*Barbering I* (C19H09), *Barbering II* (C19H10)*, and Barbering III* (C19H11)
Credit:	1 credit
Grade Level(s):	11-12
Student-Teacher Ratio:	15:1 (TCA 62-2-123)
Elective Focus - Graduation Requirements:	This course satisfies one of three credits required for an elective focus when taken in conjunction with other Human Services courses.
Program of Study (POS) Concentrator:	This course satisfies one out of two required courses to meet the Perkins V concentrator definition when taken in sequence in the approved program of study.
Programs of Study and Sequence:	This is the Year 4 and final course in the Barbering program of study.
Aligned Student Organization:	SkillsUSA: https://www.skillsusatn.org/
Coordinating Work-Based Learning:	Teachers who hold an active WBL certificate may offer placement for credit when the requirements of the state board's WBL Framework and the Department's WBL Policy Guide are met. For information, visit https://www.tn.gov/education/educators/career-and-technical-education/work-based-learning.html.
Promoted Tennessee Student Industry Credentials:	Credentials are aligned with postsecondary and employment opportunities and with the competencies and skills that students acquire through their selected program of study. For a listing of promoted student industry credentials, visit https://www.tn.gov/education/educators/career-and-technical-education/student-industry-certification.html.
Teacher Endorsement(s):	560, 780
Required Teacher Certifications:	Tennessee Master Barber License and Tennessee Barber Instructor License Please refer to Occupational Educator Licensure Guidance for a full list.
Required Teacher Training:	None
Teacher Resources:	https://www.tn.gov/education/educators/career-and-technical-education/career-clusters/cte-cluster-human-services.html Best for All Central: https://bestforall.tnedu.gov

Course at a Glance

CTE courses provide students with an opportunity to develop specific academic, technical, and 21st-century skills necessary to be successful in careers and life. In pursuit of ensuring every student in Tennessee achieves this level of success, we begin with rigorous course standards that feed into intentionally designed programs of study.

Students engage in industry-relevant content through general education integration and experiences such as career and technical student organizations (CTSO) and work-based learning (WBL). Through these experiences, students are immersed with industry-standard content and technology, solve industry-based problems, meaningfully interact with industry professionals, and use/produce industry-specific, informational texts.

Using a Career and Technical Student Organization (CTSO) in Your Classroom
CTSOs are a great resource to put classroom learning into real-life experiences for students through classroom, regional, state, and national competitions, and leadership opportunities. Below are CTSO connections for this course, note this is not an exhaustive list.

- Participate in the CTSO Fall Leadership Conference to engage with peers by demonstrating logical thought processes and developing industry-specific skills that involve teamwork and project management.
- Participate in contests that highlight job skill demonstration, interviewing skills, community service activities, extemporaneous speaking, and job interviews.
- Participate in leadership activities such as Student2Student Mentoring, National Week of Service, Officer Training, and Community Action Project.

Using Work-Based Learning (WBL) in Your Classroom
Sustained and coordinated activities that relate to the course content are the key to successful work-based learning. Possible activities for this course include the following. This is not an exhaustive list.

- **Standards 1.1-1.2** | Complete mock interviews with local industry partners.
- **Standards 2.1-6.1** | Provide salon services to clients that include skin care, nail care and enhancements, and hairstyling/cutting and chemical services.
- **Standards 7.1-7.2** | Demonstrate mastery of skills and understanding through completion of practice state board exams.
- **Standards 8.1-8.2** | Develop a full-service salon with services and pricing to offer to potential clients, following all state laws and licensing regulations.

Course Description

Barbering IV is the capstone course in the *Barbering* program of study intended to prepare students for careers in barbering by developing an understanding and practical skills in efficient and safe work practices, career and business analysis, advanced hair techniques and chemical services, and state board theoretical and practical application. Proficient students will have applied the full range of knowledge and skills acquired in this program of study toward experiences in practical applications of barbering practices as approved by the instructor. Laboratory facilities and

experiences simulate those found in the barbering industry. Upon completion and acquisition of 340 hours, students are eligible to take the Tennessee Board of Cosmetology and Barbering Examination for a Tennessee Barbering Technician License.

Course Standards

1. **Career Exploration**

   1.1 Graduation Plan: Select a **barbering pathway** such as master barber. Other examples may include, but are not limited to, natural hair stylists, barbers, or barber educators. Develop a **personal graduation plan** that includes steps to transition into postsecondary, salon, or other barbering service. Explain the steps it will take to prepare for and pass certification to become licensed in the barbering field.

   1.2 Professional Resume: Discuss what is typically included in the **resumes** of professionals. Compare and contrast several examples and create a personal resume modeled after elements identified in the search. Research **potential employers,** write a **cover letter** for the specific career focus that is the best match for your skills for success, and organize your **portfolio for employment**. Practice the **interview process** using the employment portfolio.

2. **Safety, Sanitation, and Efficient Work Practices**

   2.1 Personal, Client, and Salon Safety: Use Occupational Safety and Health Administration (OSHA) guidelines, Environmental Protection Agency (EPA) guidelines, and state and national code requirements to identify **risks of illness, communicable diseases, and injuries in the salon**. Identify **practices for safe working conditions** giving a rationale for each. Complete an instructor-made **safety test** with 100% accuracy and demonstrate proficiency on the pre-exam setup and disinfection portion of the state board exam.

   2.2 Posture and Body Mechanics: Demonstrate **appropriate barber posture and body positions** while completing advanced haircutting and hairstyling techniques using the elements and principles of design.

3. **Nail Care**

   3.1 Nail Treatment: Demonstrate proficiency in **nail care** by completing the following skills:
   a. observe and identify skin and nail diseases and disorders prior to nail services and refer the client to a doctor or use appropriate techniques; and
   b. use proper disinfection techniques and infection control practices throughout the performance of nail care services using the appropriate EPA-mandated and registered products.

4. **Advanced Properties and Procedures for Hair**

   4.1 Advanced Hair Techniques: Demonstrate **proficiency in advanced hair techniques**, such as haircutting, chemical services, and natural hair styling.

   4.2 Hair and Scalp Diseases: Observe and identify **hair and scalp diseases and/or disorders** following **safety and sanitation procedures**. Refer clients to doctors and/or use recommended techniques when appropriate.

   4.3 Proper Disinfection: Use proper **disinfection techniques and infection control practices** throughout the performance of hair care services using the appropriate EPA-mandated and registered products.

   4.4 Problem-Solving: Demonstrate and explain **problem-solving techniques in advanced hair design and shaping.**

   4.5 Hair Removal: Employ safe and sanitary **hair removal procedures**.

   4.6 Texturizing: Exhibit and explain the difference in **texturizing techniques**.

   4.7 Braiding and Extensions: Demonstrate different **braiding and braiding extension techniques, materials in extensions, and implements** used in braiding.
      a. Analyze the correlation between braiding techniques and a client's hair type and texture, scalp condition, curl configuration, scalp abrasions, and hair thinning or balding.
      b. Classify textured sets and styles used in braiding natural curly hair.
      c. Demonstrate understanding of all braiding and braiding extension techniques.
      d. Demonstrate and explain problem-solving techniques in extension design work.

   4.8 Facial Grooming: Demonstrate proper techniques for **shaving and facial hair design**, using appropriate **razor cuts** and **shaving techniques**.

5. **Advanced Techniques in Chemical Services**

   5.1 Consultation, Hair Analysis, and Chemical Service: Perform an effective **consultation, hair analysis, and chemical texture service** for a client. Evaluate the positive and negative outcomes of the consultation, analysis, and chemical texture service. Analyze concepts related to chemical texture services to demonstrate the following while adhering to all directions and safety procedures:
      a. perm techniques,
      b. hair relaxing techniques, and
      c. curl re-forming (soft curl permanents).

5.2 <u>Hair Coloring Techniques</u>: Evaluate concepts related to **advanced hair coloring techniques** and demonstrate **proper procedures** while adhering to all **directions and safety procedures**.

5.3 <u>Special Challenges in Hair Color and Corrective Solutions</u>: Investigate and apply **problem-solving techniques** for special challenges in specific hair colors and corrective solutions. Discuss effective color correction, gray hair, damaged hair, red hair color, brunettes, blondes, and other special conditions.

6. Advanced Techniques in Skin Care

6.1 <u>Skin Care Techniques</u>: Demonstrate proficiency in **advanced skin care techniques**, such as facials, manipulations, and makeup application. Observe and identify **skin and facial diseases and/or disorders** following **safety and sanitation procedures.** Refer clients to doctors and/or use recommended techniques when appropriate.

7. State Board Theoretical and Practical Application

7.3 <u>State Board Theory Exam</u>: Demonstrate a thorough understanding of the following **Tennessee Board of Master Barber Theoretical topics** to prepare for the theory portion of the Tennessee Board of Cosmetology exam:
    a. safety and infection control,
    b. client consultation,
    c. hair, scalp, skin, and nail analysis,
    d. hairstyling,
    e. haircutting,
    f. chemical services,
    g. shaving, and
    h. skin care.

7.4 <u>State Board Practical Exam</u>: Practice and perform the **skills and procedures** listed in the current **Tennessee Barbering Practical Exam Candidate Information Bulletin,** adhering to the state-mandated time. Include the skills and procedures in the following areas:
    a. workstation preparation,
    b. haircutting,
    c. straight razor shaving,
    d. chemical wave,
    e. foil highlights,
    f. hydroxide virgin relaxer,
    g. hair color retouch,
    h. basic facial,
    i. basic manicure, and
    j. end-of-day clean-up.

8. **Barbering Career and Business Analysis**

    8.1 <u>State Laws and Licensing</u>: Research and summarize all **state laws** and **licensing procedures in the barbering field**, including but not limited to the barbering license, specialist license, salon license, instructor license, and barbering school license.

    8.3 <u>Barbering Business and Services</u>: Work in a team to identify local area businesses and other entities that provide barbering services. Conduct phone or face-to-face interviews with a business to find out the specific services offered, fee structure, location(s) and hours, contact information and other information people seeking such services might require. As a class, compile a referral guide to **barbering services in your area**. Barbering services might include but are not limited to the following:
    a. haircutting,
    b. coloring,
    c. hair styling,
    d. manicures and pedicures,
    e. shampoo and conditioning,
    f. chemical texture services,
    g. facial grooming
    h. waxing, and
    i. razor cuts.

Standards Alignment Notes

*References to other standards include:
- P21: Partnership for 21st Century Skills [Framework for 21st Century Learning](#)
  - Note: While not all standards are specifically aligned, teachers will find the framework helpful for setting expectations for student behavior in their classroom and practicing specific career readiness skills.

Introduction to Human Studies

Primary Career Cluster:	Human Services
Course Contact:	CTE.Standards@tn.gov
Course Code:	C19H19
Prerequisite:	None
Credit:	1
Grade Level:	9
Focus Elective - Graduation Requirements:	This course satisfies one of three credits required for an elective focus when taken in conjunction with other Human Services courses.
POS Concentrator:	This course satisfies one out of two required courses to meet the Perkins V concentrator definition when taken in sequence in the approved program of study.
Programs of Study and Sequence:	This is the Year 1 course in both the *Dietetics and Nutrition* and *Human and Social Sciences* programs of study.
Aligned Student Organization(s):	Family, Career and Community Leaders of America (FCCLA): http://www.tennesseefccla.org
Coordinating Work-Based Learning:	Teachers are encouraged to use embedded WBL activities such as informational interviewing, job shadowing, and career mentoring. For information, visit https://www.tn.gov/education/educators/career-and-technical-education/work-based-learning.html.
Promoted Tennessee Student Industry Credentials:	Credentials are aligned with postsecondary and employment opportunities and with the competencies and skills that students acquire through their selected program of study. For a listing of promoted student industry credentials, visit https://www.tn.gov/education/educators/career-and-technical-education/student-industry-certification.html.
Teacher Endorsement(s):	050, 051, 154, 450, 954
Required Teacher Certifications:	None
Required Teacher Training:	None
Teacher Resources:	https://www.tn.gov/education/educators/career-and-technical-education/career-clusters/cte-cluster-human-services.html Best for All Central: https://bestforall.tnedu.gov

Course at a Glance

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Students engage in industry-relevant content through general education integration and experiences such as career and technical student organizations (CTSO) and work-based learning (WBL). Through these experiences, students are immersed with industry-standard content and technology, solve industry-based problems, meaningfully interact with industry professionals, and use/produce industry-specific, informational texts.

Using a Career and Technical Student Organization (CTSO) in Your Classroom

CTSOs are a great resource to put classroom learning into real-life experiences for students through classroom, regional, state, and national competitions, and leadership opportunities. Below are CTSO connections for this course, note this is not an exhaustive list.

- Participate in the CTSO Fall Leadership Conference to engage with peers by demonstrating logical thought processes and developing industry-specific skills that involve teamwork and project management.
- Participate in contests that highlight job skill demonstration, interviewing skills, community service activities, extemporaneous speaking, and job interviews.
- Participate in leadership activities such as Promote and Publicize FCCLA, Parliamentary Procedure, Entrepreneurship, and Chapter Service Project Display and Portfolio.

Using Work-Based Learning (WBL) in Your Classroom

Sustained and coordinated activities related to the course content are the key to successful work-based learning. Possible activities for this course include the following. This is not an exhaustive list.

- Standards 1.1-2.2 | Participate in a panel discussion with social service providers to talk about career planning and advancement.
- **Standards 3.1-3.4** | Visit the school cafeteria to learn about school nutrition guidelines.
- Standards 4.1-4.2 | Invite a therapist to talk about domestic violence in teen relationships.
- Standards 5.1-6.2 | Invite a teen substance abuse counselor to discuss teen drug abuse and the importance of good communication in the counseling field.
- Standards 7.1-7.3 | Invite a registered dietitian to discuss meal planning techniques to meet nutritional needs for specified individuals.
- Standards 8.1-8.4 | Connect virtually to a child psychologist to discuss developmental issues that are increasing amongst children.
- Standard 9.1 | Present data analysis presentation to Human Service professionals.

Course Description

Human Studies is a foundational course for students interested in becoming a public advocate, social worker, dietician, nutritionist, counselor, or community volunteer. Upon completion of this course, a proficient student will have an understanding of human needs, an overview of social services, career investigation, mental health, and communication.

Course Standards

1. **Overview of Human and Social Services**

   1.1 <u>Historical Milestones</u>: Research and summarize the **significant milestones** in the history of human services and dietetics fields**.**

2. **Career Investigation**

   2.1 <u>Career Preparation</u>: Compare and contrast **occupations** by education and licensing requirements, job availability, salaries, and benefits. Outline an **educational pathway** to obtain the necessary level of education for a chosen occupation.

   2.2 <u>Employability Skills</u>: Research the **management skills** required of individuals to be productive members of society. Identify the **employability skills** related to time management, organizational planning, and professionalism necessary for success in diverse environments.

   2.3 <u>Confidentiality and Ethics</u>: Describe the importance of **confidentiality** in developing professional and therapeutic relationships. Demonstrate an awareness and understanding of how to approach **ethical dilemmas** that arise in academic, professional, and personal situations.

   2.4 <u>Ethical Artificial Intelligence (AI)</u>: **Explore the ethical implications of AI usage** through interactive discussions and case studies, learning to identify bias, ensure fairness, and protect privacy in AI systems. **Develop** critical thinking **skills to evaluate the societal impact of AI technologies**, while fostering a sense of responsibility and ethical decision-making in the own use of AI tools.

   2.5 <u>Career and Technical Student Organization Introduction</u>: Introduce the program's aligned **Career and Technical Student Organization** (CTSO), **Family, Career, Community Leaders of America** (**FCCLA)**, through an interactive activity, such as a classroom competition.

3. **Human Needs**

   3.1 <u>Levels of Human Growth</u>: Describe the different **levels of human growth**, using research such as Maslow's hierarchy of needs, and articulate the different **characteristics of each level**.

   3.2 <u>Nutrition and Development</u>: Apply basic concepts of **nutrition across the lifespan** to optimize development. Research the importance of **balanced nutrition on human development and productivity** and the correlation to mental health and wellness.

   3.3 <u>Goals and Decision-Making</u>: Explain the relationship between **goals, values, and decision-making**. Analyze the impact they have on **human growth and development**. Differentiate between the types of goals and create a S.M.A.R.T. goal for each type.

   3.4 <u>Self-Esteem and Self-Image</u>: Research the **development of self-esteem and self-image** in individuals. Create a list of factors that promote and hinder the development of positive self-esteem and self-image. Formulate a plan to build/improve self-esteem and self-image.

4. **Relationships**

   4.1 <u>Interpersonal Relationships</u>: Evaluate factors that impact **human growth and development** in areas related to **interpersonal relationships**. Explain how to build healthy relationships and how their role impacts human growth and development.

   4.2 <u>Conflict Resolution</u>: Identify the various **types of conflict** and create strategies for using effective **conflict resolution** methods. Research the outcomes and impacts of using **negative conflict resolution methods**, including peer pressure and bullying/cyberbullying.

5. **Communication Skills**

   5.1 <u>Communication Techniques</u>: Practice using appropriate **communication techniques**, including verbal and nonverbal communication as well as active listening skills.

   5.2 <u>Professional and Informal Communication</u>: Compare and contrast **skills for communicating professionally** as well as informally in **everyday social interactions**. Differentiate between verbal and nonverbal communication. List specific techniques for effective communication and evaluate how **different cultures** attach different meanings to communication techniques.

6. Mental Health

6.1 <u>Stress and Response to Crisis</u>: Investigate the **physiological effects of stress and crisis** using research from the National Institute of Mental Health. Synthesize the information to identify the **types of crises** and create a graphic illustration of appropriate responses, management strategies, and technology available to meet individual and family needs during crisis situations.

6.2 <u>Mental Health Disorders</u>: Identify **types of mental health disorders** as well as **signs and symptoms and treatment** options for each disorder including but not limited to Generalized Anxiety Disorder (GAD), depression, eating disorders, and substance abuse.

The following standards are recommended for students continuing in the *Dietetics and Nutrition* program of study.

7. Nutrition and Wellness

7.1 <u>Food Safety and Sanitation Procedures</u>: Compile a list and critique **safety and sanitation procedures** related to handling, preparing, storing, and serving food. Review **general laboratory safety procedures,** including but not limited to prevention and control procedures. Incorporate safety procedures and complete the safety test with 100 percent accuracy.

7.2 <u>Nutrition Principles</u>: Evaluate **nutrition principles**, food plans, and specialized dietary plans.

7.3 <u>Food Preparation</u>: Demonstrate **food preparation techniques** including knife skills, measuring skills, and reading a recipe.

The following standards are recommended for students continuing in the *Human and Social Science* program of study.

8. Theories of Development

8.1 <u>Ecological Factors Related to Development</u>: Research and analyze the **ecological factors** that **promote and inhibit the optimal development** of individuals, children, and families.

8.2 <u>Major Research Methodologies</u>: Differentiate between the **major methodologies** used in research on human growth and development. Compare and contrast the **benefits and consequences** of each, including ethical issues involved with each method.

8.3 <u>Development Theories</u>: Research **theories associated with the development** of individuals, children, and families. Theories to research include, but are not limited to the following:

1. developmental theory,
2. behavioral theory, and
3. cognitive-behavioral theory.

8.4 <u>Theories of Mental Health</u>: Research and summarize the **theories of mental health**. Research should include **key people** in the development of the theory, **the main points** of the **theory,** and **supporting evidence.** Choose one of the following research projects:
   a. **Motivational Theory**: Research motivational theory, including key figures such as Abraham Maslow and his hierarchy of needs, and theories of intrinsic and extrinsic motivation. Summarize the main points of motivational theory, including the role of basic needs, drives, and goals in shaping behavior and mental health. Explore supporting evidence from psychological research studies that demonstrate the influence of motivation on mental health outcomes.
   b. **Behavioral Theory**: Research behavioral theory, focusing on influential figures such as B.F. Skinner and his principles of operant conditioning. Outline the main concepts of behavioral theory, including reinforcement, punishment, and observational learning, and their implications for mental health. Outline the application of behavioral principles in therapeutic interventions for mental health disorders, such as cognitive-behavioral therapy (CBT) and behavior modification techniques.
   c. **Ecological Theory**: Investigate ecological theory, with a focus on figures such as Urie Bronfenbrenner and his ecological systems theory. Summarize the main points of ecological theory, including the influence of environmental factors, social contexts, and interpersonal relationships on mental health. Explore evidence that supports the ecological perspective, including studies on the impact of family dynamics, peer relationships, and community resources on mental health outcomes.
   d. Compile the research findings with other artifacts for inclusion in a program portfolio to be updated throughout the program of study.

9. Data Analysis

9.1 <u>Data Analysis in Human Services</u>: Research the use of **data in Human Service** career fields. Include data that is generated internally by businesses, and externally by local communities, state, and the nation. Explore examples of **how the data is used**, including the following:
   a.   customer/client use of products and services;
   b.   demographics of end users;
   c.   community, state, and national statistics; and
   d.   data that must be reported to another entity.

Standards Alignment Notes

*References to other standards include:
- FACS: National Standards for Family and Consumer Sciences Education, Second Edition: National Association of State Administrators of Family and Consumer Sciences, [FACS](#).
- P21: Partnership for 21st Century Skills [Framework for 21st Century Learning](#)

o Note: While not all standards are specifically aligned, teachers will find the framework helpful for setting expectations for student behavior in their classroom and practicing specific career readiness skills.

Nutrition Across the Lifespan

Primary Career Cluster:	Human Services
Course Contact:	CTE.Standards@tn.gov
Course Code:	C19H15
Prerequisite:	*Introduction to Human Studies* (C19H19)
Credit:	1
Grade Level:	10
Focus Elective - Graduation Requirements:	This course satisfies one of three credits required for an elective focus when taken in conjunction with other Human Services courses.
Program of Study (POS) Concentrator:	This course satisfies one out of two required courses to meet the Perkins V concentrator definition when taken in sequence in the approved program of study.
Programs of Study and Sequence:	This is the Year 2 course in the *Dietetics and Nutrition* program of study.
Aligned Student Organization:	Family, Career and Community Leaders of America (FCCLA): http://www.tennesseefccla.org
Coordinating Work-Based Learning:	Teachers are encouraged to use embedded WBL activities such as informational interviewing, job shadowing, and career mentoring. For information, visit https://www.tn.gov/education/educators/career-and-technical-education/work-based-learning.html.
Promoted Tennessee Student Industry Credentials:	Credentials are aligned with postsecondary and employment opportunities and with the competencies and skills that students acquire through their selected program of study. For a listing of promoted student industry credentials, visit https://www.tn.gov/education/educators/career-and-technical-education/student-industry-certification.html.
Teacher Endorsement(s):	050, 051, 154, 450, 954
Required Teacher Certifications:	None
Required Teacher Training:	None
Teacher Resources:	https://www.tn.gov/education/educators/career-and-technical-education/career-clusters/cte-cluster-human-services.html Best for All Central: https://bestforall.tnedu.gov

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Using a Career and Technical Student Organization (CTSO) in Your Classroom

CTSOs are a great resource to put classroom learning into real-life experiences for students through classroom, regional, state, and national competitions, and leadership opportunities. Below are CTSO connections for this course; note this is not an exhaustive list.

- Participate in the CTSO Fall Leadership Conference to engage with peers by demonstrating logical thought processes and developing industry-specific skills that involve teamwork and project management.
- Participate in contests that highlight job skill demonstration, interviewing skills, community service activities, extemporaneous speaking, and job interviews.
- Participate in leadership activities such as Promote and Publicize FCCLA, Parliamentary Procedure, Entrepreneurship, and Chapter Service Project Display and Portfolio.

Using Work-Based Learning (WBL) in Your Classroom

Sustained and coordinated activities related to the course content are the key to successful work-based learning. Possible activities for this course include the following. This is not an exhaustive list.

- **Standards 1.1-4.5** | Invite a dietitian to discuss meals and nutrients.
- **Standards 5.1-5.3** | Participate in a panel discussion with people who follow various lifestyles and diets.
- **Standards 6.1** | Connect virtually with a representative from the agriculture industry and create a presentation about genetically modified foods.
- **Standards 7.1** | Invite a representative from the food industry to discuss handling, transportation, storage, processing, and packaging of food from point of origin to point of sale.
- **Standards 8.1-8.2** | Interview a Women, Infant, and Children (WIC) counselor from the local health department to discuss the nutritional support programs that are available to women, infant, and children.
- **Standard 9.1** | Present the data analysis presentation to Human Service professionals.

Course Description

Nutrition Across the Lifespan is for students interested in learning more about becoming a dietitian, nutritionist, counselor, or pursuing a variety of scientific, health, or culinary arts professions. Upon completion of this course, proficient students will understand human anatomy and physiological systems, nutrition requirements, as well as social, cultural, and other impacts on food preparation and integrity.

Course Standards

1. **Safety and Sanitation**

    1.1 <u>Common Lab Safety Procedures</u>: Demonstrate **safety and sanitation procedures** related to handling, preparing, storing, and serving food. Identify and review **general common laboratory safety procedures**, including but not limited to prevention and control procedures and **personal hygiene expectations**. Incorporate safety procedures and complete a teacher-made safety test with 100 percent accuracy.
        a. Demonstrate proper and safe handling of knives, tools, and equipment.
        b. Apply the fundamentals of time, temperature, and cooking methods to cooking, cooling, reheating, and holding a variety of foods.
        c. Demonstrate cooking methods that increase nutritional value and lower calorie and fat content.

2. **Nutrition and Health Overview**

    2.1 <u>Dietary Guidelines for Americans</u>: Summarize the **Dietary Guidelines for Americans** and its relationship to optimum physical, mental, and social well-being at all stages of development across the life span as outlined by the United States Department of Agriculture (USDA) and Health and Human Services (HHS). Illustrating findings on the **nutritional needs of individuals and families** in relation to age, gender, activity level, and health status.

3. **Anatomy and Physiology of Nutrition**

    3.1 <u>Anatomy and Physiology of the Gastrointestinal System</u>: Create a model or graphic illustration that identifies the major **anatomic structures and accessory organs of the gastrointestinal (GI) system**. Explain the **function of each structure**, including the accessory organs, in the process of digestion, absorption, and transport of nutrients in the body, including the conversion of glucose to adenosine triphosphate (ATP). Also describe common gastrointestinal complications and digestive diseases, including how the body deals with deficiencies and excess nutrients and the impact on overall health.

    3.2 <u>Macronutrients, Micronutrients, and Water</u>: Identify, analyze, and visually represent the **macronutrients, micronutrients, and water** required in the **human diet**. Include the

common food sources of those nutrients, their chemical properties, and their function in the body, as well as the influence upon biological systems in reference to maintenance and growth.
   a. macronutrients include carbohydrates, lipids, proteins;
   b. micronutrients include minerals, vitamins; and
   c. water.

4. Nutritional Requirements Across the Lifespan

4.1 <u>United States Department of Agriculture (USDA) Guidance</u>: Accurately read, interpret, and communicate understanding of **guidance from the U.S. Food and Drug Administration (FDA)**, such as nutrition labels and daily value recommendations using accurate symbols, key terms, and other domain-specific words and phrases.
   a. Accurately read and interpret nutrition labels using correct symbols and terminology.
   b. Analyze nutrition labels in correlation to specific dietary needs.

4.2 <u>Life Span Nutritional Guidelines</u>: Research and prepare informational artifacts for consumers that present the **specific nutritional guidelines for each stage of the life span** using scientifically accurate terms and symbols. For each life span phase, include the following:
   a. how nutritional needs change throughout the lifespan;
   b. factors that impact food choices at various stages of the lifespan;
   c. common nutritional excesses and deficiencies at various stages of the lifespan;
   d. importance of fitness and exercise during each stage of the lifespan; and
   e. plan meals for each stage of the lifespan.

4.3 <u>Meal Planning</u>: Analyze various meal plans that meet the **2020-2025 Dietary Guidelines for Americans** recommended by the U.S. Department of Agriculture. Create a meal plan that addresses the nutritional needs of a specific individual based on their age, gender, activity level, and other factors and justify choices using evidence. Select, prepare, and serve food(s) from the **meal plan** following recipes precisely, including defining and utilizing specific **culinary and measurement terms** as needed. Practice proper **serving and etiquette principles** during appropriate situations.

4.4 <u>Food Journal Analysis</u>: Keep a **food journal**. Analyze the **nutrient content** of food consumed using a **nutrient analysis program** based on age, gender, activity level, and health status. Summarize the findings and include conclusions drawn on recommendations of how the diet could be modified to align with the current edition of the Dietary Guidelines for Americans more closely**.**

4.5 <u>Alternative Diet and Lifestyle Approaches</u>: Compare and contrast **alternative diet and lifestyle approaches to the Dietary Guidelines for Americans** for individuals of the same age and gender. Explain the reasons for the dietary differences summarizing information to describe the **physiological differences of the lifestyles**, including, but not limited to the following:

a. differences in physical activity (e.g., athletic training);
b. differences in religious or ethical values (e.g., vegetarian, vegan, kosher);
c. differences based on disease or physiological need (e.g., gluten-free and low-sodium diets); and
d. common diet-related diseases such as diabetes and/or cardiovascular disease.

5. Food Preferences and Choices

5.1 <u>Food Choices and Preferences</u>: Research and summarize the **factors that contribute to food choices and preferences,** including cultural, geographical, economic, psychological, and social influences. Describe the most likely results of preferences and external factors on nutritional intake.
   a. Example of a geographical external factor on nutritional needs: Individuals living in an area without adequate sunlight exposure may need to eat a diet rich in Vitamin D to make up for vitamin deficiency.
   b. Example of geographical preference on food choice: Individuals living in a colder climate might prefer methods of cooking that keep heat in the living area, while an individual living in a warmer climate might prefer preparation methods that reduce heat.

5.2 <u>Food Choices Related to the Senses and Preparation Techniques</u>: Form a hypothesis, design, and conduct an experiment to identify the **role of the senses and/or food preparation techniques in food choices**. Summarize and defend results.

5.3 <u>Nutritional Claims of Various Diets</u>: Research **nutritional claims of various diets** and use appropriate/reliable sources of nutritional information to determine the validity of those claims. Use nutritional databases, food label information, and other sources to analyze the **nutrient composition** of one day of foods on each diet investigated. Compare and contrast two plans for an individual with specific characteristics, noting similarities and differences between the two diets.

6. Nutritional Issues and Controversies

6.1 <u>Topics in Nutrition</u>: Synthesize evidence from multiple sources to analyze **topics in nutrition**, including but not limited to the following:
   a. genetically modified foods,
   b. artificial sweeteners versus natural sugar,
   c. organic and local food movements,
   d. benefits and risks of different forms of dieting, and
   e. use of probiotics.
Evaluate the validity and credibility of source materials and deduce the principal arguments for each, carefully weighing the author's evidence against potential biases.

6.2 <u>Obesity in America</u>: Describe the correlation of **energy balance, lifestyle, diet, age, gender, and metabolism** to the obesity epidemic in America. Compare and contrast how different diets, habits, heredity, and physical characteristics contribute to obesity. Analyze the **government's role in the food supply** and research various **initiatives to fight obesity** and improve nutrition across the nation including government assistance programs.

7. Food Preparation and Integrity

7.1 <u>Food Supply</u>: Investigate the **food supply chain from the point of origin to the point of sale** – analyzing handling, transportation, storage, processing, and packaging – to identify where **food safety and nutritional value** could be compromised. Determine where food is most susceptible to contamination, food-borne illness, spoilage, and nutrient loss.

7.2 <u>Selection and Preparation of Food</u>: Demonstrate **food selection and preparation methods** that maximize the nutritional value of foods while minimizing dietary health risks. Plan and conduct nutrition laboratory experiments to determine the **physical and chemical changes in food structure through chemical reactions** and then compare and contrast the results. Demonstrate relationships among concepts including, but not limited to the following:
   a. heat,
   b. acidity level,
   c. fermentation,
   d. Maillard reactions,
   e. chemically processed foods, and
   f. preparation techniques and product yield.

8. Socioecological Nutrition

8.1 <u>Government Nutrition Programs</u>: Analyze the **roles and responsibilities of the USDA, Food and Nutrition Services (FNS), Demographic and Health Surveys (DHS), and Food and Drug Administration (FDA)** in relation to food and nutrition. Research various government programs that aim to **improve the nutrition of low-income families**.

8.2 <u>Healthy Living Strategies</u>: Describe **strategies** that can be implemented at a workplace or in the community to **promote the consumption of healthy foods and beverages**.

9. Final Project

9.1 <u>Team Project with Data Analysis</u>: As a team, **identify a problem** related to the program of study as a whole. **Research and utilize the Engineering Design Process** to design a solution. Document the following steps in an engineering design notebook for inclusion in the program portfolio. When possible, connect the problem to an existing FCCLA event.
   a. **Problem Identification**: Brainstorm specific problems and challenges within the program of study. Conduct basic research to understand the scope and implications of the identified problem. Identify one problem as a focus area.

b. **Research and Analysis**: Conduct in-depth research on chosen topics related to the problem. Locate and analyze a dataset related to the problem.

c. **Review the Stages of the Engineering Design Process**: Define the problem, research, brainstorm solutions, develop prototypes, test, evaluate, and iterate. Consider constraints such as cost, efficiency, and environmental impact during the design process.

d. **Project Implementation**: Assign specific roles within the design teams (e.g., project manager, researcher, designer, tester). Design a solution tailored to address the identified problem or scenario. Document progress through design journals, sketches, diagrams, and digital presentations. (Note: Prototype is optional in the Year 2 course.)

e. **Presentation and Reflection**: Showcase the problem and solution to the class. Share the data that was analyzed and how it affected the solution. Discuss the design process and challenges. As a class, critically evaluate the effectiveness and feasibility of the solutions and propose potential improvements.

Standards Alignment Notes

*References to other standards include:
- FACS: National Standards for Family and Consumer Sciences Education, Second Edition: National Association of State Administrators of Family and Consumer Sciences, FACS.
- P21: Partnership for 21st Century Skills Framework for 21st Century Learning
    - Note: While not all standards are specifically aligned, teachers will find the framework helpful for setting expectations for student behavior in their classroom and practicing specific career readiness skills.

Nutrition Science & Diet Therapy

Primary Career Cluster:	Human Services
Course Contact:	CTE.Standards@tn.gov
Course Code:	C19H16
Prerequisite:	*Nutrition Across the Lifespan* (C19H15) or *Health Science Education (C14H14)*
Credit:	1
Grade Level:	11
Focus Elective - Graduation Requirements:	Satisfies one of three credits required for elective focus if taken in conjunction with other Human Services or Health Science courses. In addition, satisfies one credit of laboratory science required for graduation.
Program of Study (POS) Concentrator:	This course satisfies one out of two required courses to meet the Perkins V concentrator definition when taken in sequence in the approved program of study.
Programs of Study and Sequence:	This is the Year 3 course in the *Dietetics and Nutrition* program of study and the third course in the *Therapeutic Services* program of study.
Aligned Student Organization(s):	Family, Career and Community Leaders of America (FCCLA): http://www.tennesseefccla.org Health Occupations Students of America (HOSA): HOSA: http://www.tennesseehosa.org
Coordinating Work-Based Learning:	Teachers are encouraged to use embedded WBL activities such as informational interviewing, job shadowing, and career mentoring. For information, visit https://www.tn.gov/education/educators/career-and-technical-education/work-based-learning.html.
Promoted Tennessee Student Industry Credentials:	Credentials are aligned with postsecondary and employment opportunities and with the competencies and skills that students acquire through their selected program of study. For a listing of promoted student industry credentials, visit https://www.tn.gov/education/educators/career-and-technical-education/student-industry-certification.html.
Teacher Endorsement(s):	050, 051, 154, 450, 577, 720, 954
Required Teacher Certifications:	For the 577 and 720 endorsements, please refer to the Occupational Educator Licensure Guidance.
Optional Teacher Training:	Teachers who have never taught *Nutrition Science and Diet Therapy* may attend an optional training provided by the Department of Education to obtain resources and guidance.
Teacher Resources:	https://www.tn.gov/education/educators/career-and-technical-education/career-clusters/cte-cluster-human-services.html Best for All Central: https://bestforall.tnedu.gov

Course at a Glance

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Students engage in industry-relevant content through general education integration and experiences such as career and technical student organizations (CTSO) and work-based learning (WBL). Through these experiences, students are immersed with industry-standard content and technology, solve industry-based problems, meaningfully interact with industry professionals, and use/produce industry-specific, informational texts.

Using a Career and Technical Student Organization (CTSO) in Your Classroom

CTSOs are a great resource to put classroom learning into real-life experiences for students through classroom, regional, state, and national competitions, and leadership opportunities. Below are CTSO connections for this course; note this is not an exhaustive list.

- Participate in the CTSO Fall Leadership Conference to engage with peers by demonstrating logical thought processes and developing industry-specific skills that involve teamwork and project management.
- Participate in contests that highlight job skill demonstration, interviewing skills, community service activities, extemporaneous speaking, and job interviews.
- Participate in leadership activities such as National Programs in Action, Parliamentary Procedure, Entrepreneurship, Advocacy and Professional Presentation.

Using Work-Based Learning (WBL) in Your Classroom

Sustained and coordinated activities related to the course content are the key to successful work-based learning. Possible activities for this course include the following. This is not an exhaustive list.

- **Standards 1.1-7.1** | Shadow a dietitian or participate in an internship to observe patient workups and nutrition plan creation.
- **Standards 2.1-2.3** | Complete the competitive event Sports Nutrition to evaluate optimum nutrition for an individual, completing a nutrition analysis.
- **Standards 3.1-3.2** | Create an informative artifact that explains energy balance, addressing the needs of the local community.
- **Standards 5.1-5.3** | Interview a clinical dietitian or nutritionist to explain the nutritional assessments and diagnosing tools used for improved patient care.
- **Standards 7.1-7.2** | Develop a panel discussion with local health care professionals that investigate the patient counseling process, learning proper questioning and approaches with patients.
- **Standards 8.1-8.2** | Virtually connect with a clinical dietitian to present on various diseases related to diet.
- **Standards 9.1-9.6 |** Work in a food bank and/or create an informational brochure that highlights the community resources for food distribution to those facing food insecurities.

Course Description

Nutrition Science and Diet Therapy is an applied knowledge course in nutrition for students interested in the role of nutrition in health and disease. Upon completion of this course, proficient students will be able to develop a nutrition care plan as part of the overall healthcare process, use methods for analyzing the nutritional health of a community, and understand the relationship of diet and nutrition to specific diseases. The course emphasizes the role of diet as a contributor to disease and its role in the prevention and treatment of disease. **The following standards should be implemented throughout the course as well as suggested 30 hours spent in the laboratory.**

Course Standards

1. **Professional Standards and Safety**

   1.1 <u>Career Development Plan</u>: Create a **career development plan** outlining **activities that will increase employment opportunities** for a nutrition science candidate including the following:
       a. educational opportunities,
       b. entry-level job opportunities,
       c. volunteer plans to enhance the career experience, and
       d. labor market data, including economic and demographic trends in nutrition-related occupations.

   1.2 <u>Ethics</u>: Describe the **code of ethics for dietetic practitioners** published by the Academy of Nutrition and Dietetics or other health and nutritional organizations.

   1.3 <u>Safety and Sanitation</u>: Compile and critique **safety and sanitation procedures** related to handling, preparing, storing, and serving food from industry-approved technical manuals and government fact sheets. Identify and review common **laboratory safety procedures** including but not limited to prevention and control procedures. Incorporate safety procedures and complete a teacher-made **safety test** with 100 percent accuracy.

2. **Nutrition and Health Overview**

   2.1 <u>Optimum Nutrition</u>: Explain the importance of a **balanced diet** in the achievement of **optimum nutrition**. Compare and contrast the **nutritional needs of a normal healthy diet** with the needs of a client being treated for and/or recovering from illnesses.

   2.2 <u>Body Mass Index (BMI)</u>: Define **BMI**, list the steps and information necessary to calculate BMI, and identify the **four weight categories**. Explain how dietitians and health care workers use BMI in the evaluation of their clients.

2.3   Basal Metabolic Rate (BMR): Define **BMR** and list the steps and information necessary to calculate the **energy needs** and **ideal body weight** of a client.

3.   Nutrient Metabolism

3.1   Major Metabolic Pathways: Create a model and/or graphic illustrating the **major metabolic pathways** used to produce energy for the body. Explain the **chemical processes** that occur at each stage in the pathway. Categorize each stage as an **anabolic or a catabolic reaction**, citing relevant evidence from academic or medical materials. Stages include the following:
   a.   glycolysis,
   b.   Kreb's cycle,
   c.   electron transport, and
   d.   anaerobic glycolysis.

3.2   Energy Balance: Demonstrate the ability to determine **energy balance** using standard tools and equations to calculate **Estimated Energy Requirements (EER).** Determine the **energy content of an individual's diet**. Based on the client's **EER and calculated caloric intake**, predict the effect on the **client's weight**. Calculate the following:
   a.   physical activity level (PAL),
   b.   total energy expenditure (TEE),
   c.   basal energy expenditure (BEE),
   d.   thermic effect of food (TEF), and
   e.   metabolic equivalents (METs).

4.   Nutrients

4.1   Properties of Water: Create a model or graphic that illustrates the **scientific properties of water.** Explain the **functions of water** in its relation to food, digestion, and maintenance of the body**.**

4.2   Structure of Carbohydrates: Describe the **molecular structure of carbohydrates** in relation to their function in food, food preparation, and the body using domain-specific terms. Create a graphic illustration/model to compare and contrast the differences between **complex and simple carbohydrates**.

4.3   Properties and Composition of Lipids: Analyze the **properties and composition of lipids** in relation to their functions in food preparation and to the body. Compare and contrast the composition of **saturated and unsaturated fats**. Explain the role of **cholesterol** in the body. Define and identify appropriate levels of **total cholesterol, triglycerides, HDL, and LDL**.

4.4   Molecular Structure of Proteins: Describe the molecular structure of proteins and identify **essential and nonessential amino acids**. Compare and contrast **complete and incomplete proteins** by analyzing the functions of proteins in food and their importance in

the body. Research **nutritional diseases** related to insufficient protein. Describe ways in which protein is used in food preparation.

4.5 <u>Major and Trace Minerals</u>: Using the National Institute of Health (NIH) Mineral Fact Sheets, differentiate between the **major and trace minerals**, the food sources of each, and **health conditions** associated with inadequate and excessive intake of both.

4.6 <u>Vitamins</u>: Use NIH Vitamin Fact Sheets to investigate the **chemical properties of water-soluble and fat-soluble vitamins.** Classify each vitamin and its chemical properties, identify food sources for each vitamin, and explain the main **role of vitamins** in the human body.

5. Clinical Nutritional Assessments and Diagnosis

5.1 <u>Nutritional Assessments</u>: Compare and contrast the types of data collected, the insights they give into the **nutritional status of a client**, and the limitations of the data for the following **four types of nutritional assessments** used by a registered dietitian or other trained healthcare professional:
   a. historical information,
   b. anthropometric data,
   c. physical examination, and
   d. laboratory tests.

5.2 <u>Nutrition Care Process</u>: Demonstrate the **Nutrition Care Process** to clients and/or their families and verbalize the role it plays in the total health care of a client. Outline what occurs in each of the **four phases of the process**:
   a. nutrition assessment,
   b. nutrition diagnosis,
   c. nutrition intervention, and
   d. nutrition monitoring and evaluation.
Compile a list of frequently asked questions and their answers.

5.3 <u>Nutrition Assessment Data</u>: Analyze **nutrition assessment data**, including lab data related to protein status, iron status, diabetes, heart disease, and kidney disease, gathered from client information to formulate a **nutrition diagnosis and an intervention plan**.

6. Diet Analysis

6.1 <u>Nutrient Intake</u>: Quantify the **nutrient intake of individuals** based on food journals, observations, or other reports. Using appropriate databases, determine the intake of **macro- and micro-nutrients**. Compare the individual's results to the recommended intake of each nutrient. Explain why the data would or would not be sufficient to make dietary changes. Distinguish between **nutrient-dense and calorie-dense foods**.

7. Nutritional Counseling

7.1 <u>Nutritional Counseling Techniques</u>: List and summarize various **counseling techniques**, including a patient-centered approach to counseling. Practice interviewing clients about **dietary and lifestyle habits**. Explain the purpose of **follow-up visits** and the link to continuing care.

7.2 <u>Questioning</u>: Describe the difference between **open-ended and closed-ended questions**. Demonstrate the use of open and closed-ended questions during a **mock nutritional counseling session**.

8. The Relationship of Nutrition to Specific Diseases

8.1 <u>Food Additives</u>: Drawing on findings from food and health research, compare and contrast the advantages and disadvantages of the **use of food additives in processed products**. Investigate **regulations governing the use of food additives** established by the Food and Drug Administration (FDA) and U.S. Department of Agriculture (USDA).

8.2 <u>Common Digestive Problems</u>: For each of the following common **digestive problems**, summarize symptoms, common causes, prevention strategies, and treatments. Explain how the following digestive problems can impact the **digestion and absorption of nutrients in the digestive system**:
   a. choking;
   b. vomiting;
   c. diarrhea, irritable bowel syndrome, colitis;
   d. constipation;
   e. belching and gas;
   f. heartburn and acid indigestion; and
   g. ulcers.

8.3 <u>Food Allergies and Intolerances</u>: Differentiate between **food allergies and food intolerances,** describing the body's reaction to each. Research the **eight most common food allergens** and describe **treatment for an allergic reaction**. Use academic research and medical literature to do the following:
   a. describe how the immune system of a person with a food allergy responds when exposed to the food allergen; contrast this to reactions originating from a food intolerance;
   b. outline precautions to take to avoid food allergens and/or foods to which an individual has an intolerance both at home and when eating out;
   c. recommend food substitutes and recipe modifications to avoid problematic foods, citing specific reasoning and evidence to justify the recommendation; and
   d. investigate the connection of food allergies and intolerances to oral care and swallowing concerns and disorders.

8.4   Obesity: Research **obesity** using academic research and authoritative nutrition and obesity sources to do the following:
   a.   describe the need for prevention of obesity to begin at an early age;
   b.   analyze the role of various factors, such as appetite-regulating hormones, gut microbiota, physical activity, and body composition, that affect energy homeostasis;
   c.   describe the contributions of genetics and environment to the development of obesity;
   d.   justify the use of a research-based weight-loss strategy that ensures adequate nutrition;
   e.   make a claim about the need for extreme measures (such as surgery) for extreme cases, supporting the claim(s) with reasoning and evidence from research;
   f.   compare and contrast the impact of lifestyle changes to increase physical activity and address stress and change environmental factors on an individual's weight;
   g.   make recommendations on activities necessary for the maintenance of weight loss; and
   h.   investigate the connection of obesity to oral care and swallowing concerns and disorders.

8.5   Eating Disorders: Differentiate between the **major eating disorders** (anorexia, bulimia, binge eating) and **other forms of disordered eating**.
   a.   Describe the disease/condition, including symptoms and specific ways the body is affected.
   b.   Justify the role of nutrition as a contributor to the disease/condition and highlight specific dietary recommendations for minimizing those contributions.
   c.   Justify the role of nutrition in the treatment of the disease/condition, outlining a healthy eating plan and providing lists of specific foods/nutrients that should be included in the diet.
   d.   Make recommendations for other lifestyle changes and psychological interventions that will reduce the risk or aid in the therapy for the disease/condition.
   e.   Investigate the connection of eating disorders to oral care and swallowing concerns and disorders.

8.6   Vitamin Deficiencies: Research one of the following **diseases linked to vitamin consumption** issues. Summarize symptoms, common causes, prevention strategies, and treatments. Topics might include but are not limited to the following:
   a.   Beriberi,
   b.   Pellagra,
   c.   Scurvy, and
   d.   Rickets.

8.7   Osteoporosis: Research **osteoporosis and the role minerals play** in the condition.
   a.   Describe osteoporosis, including symptoms and organ(s) affected.
   b.   Justify the role of nutrition as a contributor to the disease/condition and highlight specific dietary recommendations for minimizing those contributions.

      c.   Justify the role of nutrition in the treatment of osteoporosis, outlining a healthy eating plan and providing lists of specific foods/nutrients to reduce or exclude from the diet and those that should be included in the diet.

      d.   Make recommendations for other lifestyle changes that will reduce the risks or aid the therapy for osteoporosis.

8.8   <u>Nutrition and Cancer</u>: Assess the **impact of nutrition on cancer** focusing on the body sites affected. Use academic research and medical literature to do the following:

      a.   describe the disease/condition, including symptoms and organ(s) affected;

      b.   justify the role of nutrition as a contributor to the disease/condition and highlight specific dietary recommendations for minimizing those contributions;

      c.   justify the role of nutrition in the treatment of the disease/condition, outlining a healthy eating plan for those undergoing treatments such as chemotherapy and radiation, and providing lists of specific foods/nutrients that act as anti-promoters from the diet and those that should be included in the diet;

      d.   make recommendations for other lifestyle changes that will reduce the risk or aid in the therapy for the disease/condition; and

      e.   investigate the connection of nutrition and cancer to oral care and swallowing concerns and disorders.

8.9   <u>Diabetes</u>: Research the **impact of carbohydrates on diabetes,** differentiating between **Type 1 diabetes (T1DM)** and **Type 2 diabetes (T2DM)**. Cite specific textual evidence from National Institute of Health (NIH) MedlinePlus to do the following:

      a.   describe the disease/condition, including symptoms and organ(s) affected;

      b.   justify the role of lifestyle factors as a contributor to the disease/condition and highlight specific dietary recommendations for minimizing those contributions;

      c.   justify the role of nutrition in the treatment of the disease/condition, outlining a healthy eating plan that includes a variety of dietary patterns to reduce or exclude unhealthy eating;

      d.   make recommendations for other lifestyle changes that will reduce the risk or aid in the therapy for the disease/condition; and

      e.   investigate the connection of diabetes to oral care and swallowing concerns and disorders.

8.10 <u>Cardiovascular Disease, Hypertension, and Stroke</u>: Investigate the correlation between **fats in the diet and coronary artery disease, hypertension, and stroke,** citing evidence from academic research, medical literature, and NIH sources to do the following:

      a.   describe the disease/condition, including symptoms and organ(s) affected;

      b.   justify the role of diet as a contributor to the disease/condition and highlight specific dietary recommendations for minimizing those contributions;

      c.   justify the role of nutrition in the treatment of the disease/condition, outlining a healthy eating pattern and providing lists of foods that should be included in the diet;

      d.   make recommendations for other lifestyle changes that will reduce the risks or aid the therapy for the disease/condition; and

e. investigate the connection of cardiovascular disease to oral care and swallowing concerns and disorders.

8.11 Nutrition and Renal Disease: Investigate the correlation between **diet and renal disease**. Identify **markers of renal disease**, and how they are impacted by dietary intervention, citing evidence from academic research, medical literature, and NIH sources to do the following:
   a. describe the disease/condition, including symptoms and organ(s) affected;
   b. justify the role of diet as a contributor to the disease/condition and highlight specific dietary recommendations for minimizing those contributions;
   c. justify the role of nutrition in the treatment of the disease/condition, outlining a healthy eating pattern and providing lists of foods that should be included in the diet;
   d. make recommendations for other lifestyle changes that will reduce the risks or aid the therapy for the disease/condition; and
   e. investigate the connection of nutrition and renal disease to oral care and swallowing concerns and disorders.

8.12 Celiac Disease: Research the correlation between **grain-based food consumption and celiac disease**, citing evidence to do the following:
   a. describe the disease/condition, including symptoms and organ(s) affected;
   b. explain the digestive problems and the impact on digestion and absorption of nutrients; and
   c. make recommendations for precautions that will reduce the risks of exposure in eating venues other than home.

8.13 Acids and Bases: Define *acidic* and *basic* as they relate to nutrition. Create a **pH scale**, including examples of common acidic and basic foods. Summarize **symptoms, common causes, and treatments for heartburn, acid indigestion, and ulcers.**

9. Behavioral-Environmental Assessments: The Individual Community

9.1 Community Nutritional Environment: Review the **tools for assessing the community nutritional environment**. Select one tool that identifies existing problems in the local community. Make recommendations for **informing community members** about the problem(s).

9.2 Food Insecurity: Compare issues related to **hunger and malnutrition, food insecurity, and food insufficiency** locally, nationally, and globally. Describe short-term and sustainable development **relief efforts** used to combat these problems.

Standards Alignment Notes

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Human Services Practicum

Primary Career Cluster:	Human Services
Course Contact:	CTE.Standards@tn.gov
Course Code:	C19H20
Prerequisite(s):	*Family Studies* (C19H18) or *Nutrition Science and Diet Therapy* (C19H16)
Credit:	1
Grade Level:	12
Elective Focus-Graduation Requirements:	This course satisfies one of three credits required for an elective focus when taken in conjunction with other Human Services courses.
Program of Study (POS) Concentrator:	This course satisfies one out of two required courses to meet the Perkins V concentrator definition when taken in sequence in the approved program of study.
Programs of Study and Sequence:	This is the Year 4 in both the *Dietetics and Nutrition* and *Human and Social Sciences* programs of study.
Aligned Student Organization:	Family, Career and Community Leaders of America (FCCLA): http://www.tennesseefccla.org
Coordinating Work-Based Learning:	Teachers who hold an active WBL certificate may offer placement for credit when the requirements of the state board's WBL Framework and the Department's WBL Policy Guide are met. For information, visit https://www.tn.gov/education/educators/career-and-technical-education/work-based-learning.html..
Promoted Tennessee Student Industry Credentials:	Credentials are aligned with postsecondary and employment opportunities and with the competencies and skills that students acquire through their selected program of study. For a listing of promoted student industry credentials, visit https://www.tn.gov/education/educators/career-and-technical-education/student-industry-certification.html
Teacher Endorsement(s):	050, 051, 154, 450, 954
Required Teacher Certifications:	None
Required Teacher Training:	None
Teacher Resources:	https://www.tn.gov/education/educators/career-and-technical-education/career-clusters/cte-cluster-human-services.html Best for All Central: https://bestforall.tnedu.gov

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CTSOs are a great resource to put classroom learning into real-life experiences for students through classroom, regional, state, and national competitions, and leadership opportunities. Below are CTSO connections for this course; note this is not an exhaustive list.

- Participate in the CTSO Fall Leadership Conference to engage with peers by demonstrating logical thought processes and developing industry-specific skills that involve teamwork and project management
- Participate in contests that highlight job skill demonstration, interviewing skills, community service activities, extemporaneous speaking, and job interviews.
- Participate in leadership activities such as National Programs in Action, Parliamentary Procedure, Entrepreneurship, Leadership; and Chapter Service Project Display and Portfolio.

Using Work-Based Learning (WBL) in Your Classroom

Sustained and coordinated activities related to the course content are the key to successful work-based learning. Possible activities for this course include the following. This is not an exhaustive list.

- **Standards 1.1-1.3**|Invite a human resource administrator to discuss aspects of professionalism and ethics in the working environment.
- **Standards 2.1-2.3**|Interview a behavioral therapist to discuss methods of identifying stressors and stress management.
- **Standards 3.1-4.2** |Invite the Department of Children Services (DCS) officials for an interview and guidance on legal aspects of counseling and resources that are available for community members.
- **Standards 5.1-5.2**|Participate in on-the-job training to master course standards and show evidence of skills/standards mastered.

Course Description

Human Services Practicum is a capstone course in the Human Services career cluster that provides a practicum experience for students as they develop an understanding of professional and ethical issues. The capstone course will be based on the knowledge and skills from previous courses in the human services cluster. Upon completion of the course, students will be proficient in components of communication, critical thinking, problem-solving, information technology, ethical and legal responsibilities, leadership, and teamwork. Instruction may be delivered through school-based

laboratory training or work-based learning arrangements such as cooperative education, mentoring, and job shadowing.

Course Standards

A student will have a **Personalized Learning Plan (PLP)** that identifies their long-term goals, demonstrates how the Work-Based Learning (WBL) experience aligns with their elective focus and/or high school plan of study, addresses how the student plans to meet and demonstrate the course standards, and addresses employability skill attainment in the following areas:
- application of academic and technical knowledge and skills, embedded in course standards,
- career knowledge and navigation skills,
- 21st-century learning and innovation skills, and
- personal and social skills.

1. Professionalism, Ethics, and 21st Century Skills

1.1 Professionalism: Collaboratively, develop a **professionalism rubric** with performance indicators for each of the following **professional attributes** and use it to evaluate course assignments and personal work:
   a. attendance/punctuality,
   b. professional dress and behavior,
   c. positive attitude,
   d. collaboration,
   e. honesty,
   f. respect,
   g. responsibility, and
   h. appropriate technology use.

1.2 Professional Organizations: Select and research a **professional organization in a counseling area of choice**. Cite specific textual evidence from the organization and news articles to summarize the following:
   a. the mission of the organization;
   b. benefits of belonging to the organization;
   c. credentials provided and how they are obtained and maintained;
   d. journals, newsletters, and other documents and reports it publishes;
   e. educational opportunities provided;
   f. conferences held;
   g. membership costs, levels, student memberships; and
   h. website, contact information.

1.3 Ethics: Collect **Codes of Ethics** from various counseling-related professional organizations and examine areas of commonality. Discuss the significance of including standards in these areas. Synthesize principles from the codes investigated to create a **personal code of ethics**.

2. **Stress Management**

    2.1 <u>Effects of Stress</u>: Describe how **stress affects the body and how it impacts relationships**. List **common stressors** and **ways to relieve stress** and build resilience, citing specific textual evidence from academic and news media.

    2.2 <u>Personal Stress</u>: Evaluate **personal stress level and ability to cope with stress** using the Holmes and Rahe Stress Scale and the Resiliency Center's resiliency quiz (or other appropriate instruments). Identify **stressors in your life** and create a written plan to address specific stressors, as well as to incorporate one or more general stress relievers into your daily life, justifying recommendations with reasoning and evidence from research.

    2.3 <u>Professional Stress</u>: Research **stressors encountered by human services professionals**, such as counseling, social work, or consumer services. Using evidence compiled from the research, discuss the stressors associated with counseling fields and develop a plan for how job stress might be reduced or managed.

3. Counseling Policies and Practices

    3.1 <u>Legal and Ethical Policies</u>: Analyze authentic case studies of counseling situations and assess the degree to which proposed resolutions are supported by **legal and ethical policies**, citing specific textual evidence from codes of ethics, legislation, or other appropriate materials.

    3.2 <u>Communication Skills</u>: Practice effective **verbal, nonverbal, written, and electronic communication skills** for working with clients while demonstrating the ability to empathize, motivate, listen attentively, speak courteously and respectfully, defuse client's anger or skepticism, resolve conflicting interests, and respond to client objections or complaints to the client's satisfaction.

    3.3 <u>Counseling Services</u>: Identify **local area public and private agencies, businesses, and other entities that provide counseling services** and determine the specific services offered, fee structure, location(s) and hours, contact information and other information people seeking such services might require. As a class, compile a **referral guide to human services in your area**. Counseling services might include but are not limited to the following:
    a. family,
    b. marriage,
    c. nutrition/diet,
    d. career,
    e. social services,
    f. grief,
    g. substance abuse, and
    h. financial.

4. The Counseling Environment

 4.1 <u>Suitable Counseling Environments</u>: Create a checklist to evaluate prospective environments to determine **suitability for a counseling practice**. Formulate indicators to evaluate the degree to which the environment inspires client confidence in the services provided. Include, but do not limit to, the checklist to location, proximity to transportation, safety, and functionality of office layout.

 4.2 <u>Effective Design</u>: Gathering principles of effective design from multiple sources, develop **standard operating procedures for a counseling services office** that include but are not limited to the following:
   a. maintaining patient confidentiality,
   b. office safety,
   c. emergency procedures, and
   d. workplace accident and incident reports.

5. Practicum

 5.1 <u>Practical Application</u>: Apply skills and knowledge from previous courses in an authentic **work-based learning internship, job-shadow, or classroom-based project**. Where appropriate, implement activities and use artifacts developed in previous courses.

 5.2 <u>Practicum Documentation</u>: Document the practicum using a journal to **draw connections between the experience and previous course content** by reflecting on the following:
   a. tasks accomplished and activities implemented,
   b. positive and negative aspects of the experience,
   c. interactions with clients and professionals, and
   d. personal satisfaction.

Standards Alignment Notes

*References to other standards include:
- P21: Partnership for 21st Century Skills [Framework for 21st Century Learning](#)
  - Note: While not all standards are specifically aligned, teachers will find the framework helpful for setting expectations for student behavior in their classroom and practicing specific career readiness skills.

Lifespan Development

Primary Career Cluster:	Human Services
Course Contact:	CTE.Standards@tn.gov
Course Code:	C19H17
Prerequisite:	*Introduction to Human Studies* (C19H19)
Credit:	1
Grade Level(s):	10-12
Elective Focus - Graduation Requirements:	This course satisfies one of three credits required for an elective focus when taken in conjunction with other Human Services courses.
Program of Study (POS) Concentrator:	This course satisfies one out of two required courses to meet the Perkins V concentrator definition when taken in sequence in the approved program of study.
Programs of Study and Sequence:	This is the Year 2 course in the *Human and Social Sciences* program of study.
Aligned Student Organization:	Family, Career and Community Leaders of America (FCCLA): http://www.tennesseefccla.org
Coordinating Work-Based Learning:	Teachers are encouraged to use embedded WBL activities such as informational interviewing, job shadowing, and career mentoring. For information, visit https://www.tn.gov/education/educators/career-and-technical-education/work-based-learning.html.
Promoted Tennessee Student Industry Credentials:	Credentials are aligned with postsecondary and employment opportunities and with the competencies and skills that students acquire through their selected program of study. For a listing of promoted student industry credentials, visit https://www.tn.gov/education/educators/career-and-technical-education/student-industry-certification.html.
Teacher Endorsement(s):	050, 051, 154, 450, 954
Required Teacher Certifications:	None
Required Teacher Training:	None
Teacher Resources:	https://www.tn.gov/education/educators/career-and-technical-education/career-clusters/cte-cluster-human-services.html Best for All Central: https://bestforall.tnedu.gov

Course at a Glance

CTE courses provide students with an opportunity to develop specific academic, technical, and 21st-century skills necessary to be successful in careers and life. In pursuit of ensuring every student in Tennessee achieves this level of success, we begin with rigorous course standards that feed into intentionally designed programs of study.

Students engage in industry-relevant content through general education integration and experiences such as career and technical student organizations (CTSO) and work-based learning (WBL). Through these experiences, students are immersed with industry-standard content and technology, solve industry-based problems, meaningfully interact with industry professionals, and use/produce industry-specific, informational texts.

Using a Career and Technical Student Organization (CTSO) in Your Classroom

CTSOs are a great resource to put classroom learning into real-life experiences for students through classroom, regional, state, and national competitions, and leadership opportunities. Below are CTSO connections for this course; note this is not an exhaustive list.

- Participate in the CTSO Fall Leadership Conference to engage with peers by demonstrating logical thought processes and developing industry-specific skills that involve teamwork and project management.
- Participate in contests that highlight job skill demonstration, interviewing skills, community service activities, extemporaneous speaking, and job interviews.
- Participate in leadership activities such as Focus on Children, Parliamentary Procedure, Teach and Train, and Chapter Service Project Display and Portfolio.

Using Work-Based Learning (WBL) in Your Classroom

Sustained and coordinated activities related to the course content are the key to successful work-based learning. Possible activities for this course include the following. This is not an exhaustive list.

- **Standards 1.1-6.1** | Participate in job shadowing at a variety of locations to observe the cognitive and social behavior of babies through late school-age children.
- **Standards 2.1-2.5** | Invite a labor and delivery nurse to discuss prenatal development and the pregnancy stages.
- **Standards 3.1-5.1** | Interview a pediatrician or early childhood educator to discuss the developmental stages of infants, toddlers, and preschool children.
- **Standard 6.1** | Invite a school psychologist to discuss the appropriate developmental milestones for school-age children and discuss monitors that are used to evaluate.
- **Standards 7.1** | Invite a counselor to discuss risk behaviors in teens.
- **Standards 8.1** | Invite a healthcare professional to discuss healthy lifestyles for adults.

Course Description

Lifespan Development builds basic knowledge in human growth and development. Upon completion of the course, proficient students will have knowledge of developmental theory, principles of growth, behavior of children from conception through adolescence, adult development and aging, and death and dying.

Course Standards

1. **Foundations of Human Development**

    1.1 Human development theories: Compare and contrast the following **theories of human development**. Identify the **researcher(s) credited with developing each theory** and analyze the significance of their contributions to the field of human development:
        a. psychoanalytic theory,
        b. behavioral theory,
        c. humanistic theory,
        d. cognitive theory,
        e. ecological theory,
        f. sociocultural theory,
        g. motivational theory,
        h. moral theories, and
        i. emotional development/emotional intelligence theory.

    1.2 Human Growth and Development Topics: Research and summarize a **topic related to human growth and development**. Topics might include, but are not limited to the following:
        A   cross-cultural conceptions of intelligence,
        b. self-esteem,
        c. relationships,
        d. nature vs. nurture,
        e. temperament and personality,
        f. prenatal development,
        g. brain/ adverse childhood events (ACEs), and
        h. global or community issues.

2. **Prenatal Development**

    2.1 Pre-Term Development: Outline the **biological process** and **describe each stage of growth and development** that occurs from conception to delivery of a full-term infant.

    2.2 Influence of Heredity and Environment on Infant Development: Analyze the **role of heredity and environment in infant growth and development**. Describe common **risk factors** during each stage of growth and development from conception to delivery of a full-term infant.

    2.3 DNA and Heredity: Analyze the **relationships among DNA, genes, genetics, and heredity**. Use scientific principles and evidence to explain the following:
        a. the process of how traits are passed from parents to offspring, and
        b. the most common chromosomal and gene-linked anomalies and the health implications associated with each.

2.4 <u>Infertility Treatments</u>: Compare and contrast the various **fertility treatments and technology** used to overcome male and female infertility. Discuss the **ethical implications** of using infertility treatments. Assisted reproductive technology (ART) methods can include but are not limited to the following:
    a. intrauterine insemination,
    b. in vitro fertilization,
    c. gestational carrier/surrogacy, and
    d. ovum/sperm donors.

2.5 <u>Labor and Delivery</u>: Research the various **types of labor and delivery**. Describe what happens at each stage and complications that may arise. Investigate the **treatments and medical testing** the mother and newborn might undergo during the first few postpartum days.

3. Infancy

3.1 <u>Infant Development</u>: Research and outline the **5 Areas of Development** that occur during infancy. Appraise activities and techniques that optimize the development in each area. Examples of Areas of Development may include, but are not limited to, the following:
    a. physical: head and skull, interpreting height and weight growth charts, skin, umbilical cord healing, teeth, elimination, gross motor skills, fine motor skills, sleep patterns, feeding and nutritional needs;
    b. cognitive: reflexes, language acquisition, sensory development, play, Piaget; and
    c. emotional-social: bonding, Erikson's psychosocial task, temperament vs. personality.

3.2 <u>Brain Development</u>: Illustrate the **parts of the human brain**, detailing principle functions as they relate to **physical and cognitive development**. Draw conclusions about the most important influences on and relationships among brain development, reasoning capacity, brain plasticity, and learning.

3.3 <u>Childcare Facilities</u>: Analyze nurturing practices that **support human growth and development** and apply criteria for **selecting care and services** for children and youth. In addition, analyze **community resources and services** available to families.

4. Toddlerhood

4.1 <u>Toddler Development</u>: Research and outline the **5 Areas of Development** that occur during toddlerhood. Appraise activities and techniques that optimize the development in each area. Examples of Areas of Development may include, but are not limited to the following:
    a. physical: height and weight, body proportions, teeth, gross and fine motor skills, sleep patterns;
    b. cognitive: sensory development, language acquisition/vocabulary, object permanence, recognition of body parts, understanding relationships between people and things, moral development, symbolic play, imagination, Piaget's preoperational thought; and

      c.   emotional-social: separation anxiety, independence, possessive phase, toilet training, Erikson's autonomy, self-concept, temper tantrums, regression, egocentric thinking.

5. Preschool

5.1 Preschool Development: Research and outline the **5 Areas of Development** that occur in preschool. Appraise activities and techniques that optimize the development in each area. Examples of Areas of Development may include, but are not limited to the following:
      a.   physical: height and weight, gross and fine motor skills, sleep patterns;
      b.   cognitive: sensory development, depth perception, language acquisition/vocabulary, moral development, symbolic play, imagination, Piaget's preoperational thought and centration, concept formation; and
      c.   emotional-social: Erikson's initiative, jealousy, preschool socialization, friendships with other children, Freud's development of superego, cooperative play, fears.

6. School Age

6.1 School Age Development: Research and outline the **5 Areas of Development** that occur during school age. Appraise activities and techniques that optimize the development in each area. Examples of Areas of Development may include, but are not limited to the following:
      a.   physical: height and weight, improvement of hand-eye coordination, fine motor skills development, gender differences in motor skills, development of writing, strength acquisition and endurance, sleep and rest requirements;
      b.   cognitive: Piaget's stages, numbering classifying of objects, increased attention span, developing problem-solving skills, improved memory, language development, academic learning; and
      c.   emotional-social: types of play, personality development, peer and sibling relationships.

7. Puberty and Adolescence

7.1 Adolescent Development: Research and outline the **5 Areas of Development** that occur in puberty and adolescence. Appraise activities and techniques that optimize the development in each area. Examples of Areas of Development may include, but are not limited to the following:
      a.   physical: rapid growth to cessation of growth, changes in height and weight;
      b.   cognitive: experimentation and learning, Piaget's shift from concrete thinking to formal operational thought processes, abstract thinking, formal problem solving; and
      c.   emotional-social: peer and romantic relationships, contraception, teen pregnancy, Erikson's search for identity, conflict with authority figures.

Analyze **components of a healthy and safe environment** during adolescence.

8. Adulthood

8.1 <u>Development in </u>Early, Middle, and Late Adulthood: Research and outline the **5 Areas of Development** that occur in each phase of adulthood, (i.e., **early, middle, and late)**. Analyze components of a **healthy and safe environment** and highlight **steps for achieving optimum wellness during late adulthood**. Examples of *Areas of Development* may include, but are not limited to the following:
   a. Physical:
      i. cessation of growth,
      ii. peaking of physical functions and characteristics,
      iii. decline of physical functions and characteristics, and
      iv. increase in health risks due to genetic conditions or contraction of diseases.
   b. Cognitive: post-conventional stage of moral development, continued development of intellectual and reasoning capacities plateau of mental capabilities, reevaluation of life purpose and meaning, cognitive decline, long-term versus short-term, death and dying concepts.
   c. Emotional-social:
      i. Erikson's intimacy, development of a professional and personal identity;
      ii. Erikson's task (generativity), evaluating and redesigning career options; and
      iii. Erikson's ego integrity, changes in work and leisure.

9. Developmental Tasks Theory

9.1 <u>Lifetime Change</u>: Examine the nature of change over a lifetime using **Havighurst's developmental tasks** including personal milestones:
   a. the major periods of life outlined in the course,
   b. describe major developmental changes, and
   c. key tasks associated with each period.

10. Final Project

10.1 <u>Team Project with Data Analysis</u>: As a team, **identify a problem** related to the program of study as a whole. **Research and utilize the Engineering Design Process** to design a solution. Document the following steps in an engineering design notebook for inclusion in the program portfolio. When possible, connect the problem to an existing FCCLA event.
   a. **Problem Identification**: Brainstorm specific problems and challenges within the program of study. Conduct basic research to understand the scope and implications of the identified problem. Identify one problem as a focus area.
   b. **Research and Analysis**: Conduct in-depth research on chosen topics related to the problem. Locate and analyze a dataset related to the problem.
   c. **Review the Stages of the Engineering Design Process**: Define the problem, research, brainstorm solutions, develop prototypes, test and evaluate, and iterate. Consider constraints such as cost, efficiency, and environmental impact during the design process.

d. **Project Implementation**: Assign specific roles within the design teams (e.g., project manager, researcher, designer, tester). Design a solution tailored to address the identified problem or scenario. Document progress through design journals, sketches, diagrams, and digital presentations. (Note: Prototype is optional in the Year 2 course.)

e. **Presentation and Reflection**: Showcase the problem and solution to the class. Share the data that was analyzed and how it affected the solution. Discuss the design process and challenges. As a class, critically evaluate the effectiveness and feasibility of the solutions and propose potential improvements.

Standards Alignment Notes

*References to other standards include:
- FACS: National Standards for Family and Consumer Sciences Education, Second Edition: National Association of State Administrators of Family and Consumer Sciences, [FACS](#).
- P21: Partnership for 21st Century Skills [Framework for 21st Century Learning](#)
  - Note: While not all standards are specifically aligned, teachers will find the framework helpful for setting expectations for student behavior in their classroom and practicing specific career readiness skills.

Family Studies

Primary Career Cluster:	Human Services
Course Contact:	CTE.Standards@tn.gov
Course Code:	C19H18
Prerequisite(s):	*Introduction to Human Studies* (C19H19) and *Lifespan Development* (C19H17)
Credit:	1
Grade Level:	11
Elective Focus - Graduation Requirements:	This course satisfies one of three credits required for an elective focus when taken in conjunction with other Human Services courses.
Program of Study (POS) Concentrator:	This course satisfies one out of two required courses to meet the Perkins V concentrator definition when taken in sequence in the approved program of study.
Programs of Study and Sequence:	This is the Year 3 course in the *Human and Social Sciences* program of study.
Aligned Student Organization:	Family, Career and Community Leaders of America (FCCLA): http://www.tennesseefccla.org
Coordinating Work-Based Learning:	Teachers are encouraged to use embedded WBL activities such as informational interviewing, job shadowing, and career mentoring. For information, visit https://www.tn.gov/education/educators/career-and-technical-education/work-based-learning.html.
Promoted Tennessee Student Industry Credentials:	Credentials are aligned with postsecondary and employment opportunities and with the competencies and skills that students acquire through their selected program of study. For a listing of promoted student industry credentials, visit https://www.tn.gov/education/educators/career-and-technical-education/student-industry-certification.html
Teacher Endorsement(s):	050, 051, 154, 450, 954
Required Teacher Certification:	None
Required Teacher Training:	None
Teacher Resources:	https://www.tn.gov/education/educators/career-and-technical-education/career-clusters/cte-cluster-human-services.html Best for All Central: https://bestforall.tnedu.gov

Course at a Glance

CTE courses provide students with an opportunity to develop specific academic, technical, and 21st-century skills necessary to be successful in careers and life. In pursuit of ensuring every student in Tennessee achieves this level of success, we begin with rigorous course standards that feed into intentionally designed programs of study.

Students engage in industry-relevant content through general education integration and experiences such as career & technical student organizations (CTSO) and work-based learning (WBL). Through these experiences, students are immersed with industry-standard content and technology, solve industry-based problems, meaningfully interact with industry professionals, and use/produce industry-specific, informational texts.

Using a Career and Technical Student Organization (CTSO) in Your Classroom
CTSOs are a great resource to put classroom learning into real-life experiences for students through classroom, regional, state, and national competitions, and leadership opportunities. Below are CTSO connections for this course; note this is not an exhaustive list.
- Participate in the CTSO Fall Leadership Conference to engage with peers by demonstrating logical thought processes and developing industry-specific skills that involve teamwork and project management.
- Participate in contests that highlight job skill demonstration, interviewing skills, community service activities, extemporaneous speaking, and job interviews.
- Participate in leadership activities such as Promote and Publicize FCCLA, Parliamentary Procedure, Entrepreneurship, and Chapter Service Project Display and Portfolio.

Using Work-Based Learning (WBL) in Your Classroom
Sustained and coordinated activities that relate to the course content are the key to successful work-based learning. Possible activities for this course include the following; note this is not an exhaustive list.
- **Standards 1.1-2.4** | Invite a family therapist to discuss family trends and family therapy.
- **Standards 3.1-3.3** | Invite a children's social worker to discuss the impact of parenting on children.
- **Standards 3.4 |** Invite speakers to share about their adoption experiences.
- **Standards 4.1-4.5 |** Participate in a panel discussion with family crisis managers, domestic violence professionals, and grief therapists.

Course Description

Family Studies is an applied knowledge course that examines the diversity and evolving structure of the modern family. Upon completion of the course, proficient students will have knowledge of the demographic, historical, and social changes of interpersonal relationships, as well as parenting, and the effect of stressors on the family.

Course Standards

1. **Definition and History of Family**

    1.1 <u>Family Structure History</u>: Analyze **diverse family structures** represented throughout history and in current society.

    1.2 <u>Definitions of Family</u>: Compare and contrast different **definitions of family units** found in distinct groups. Explore the **impact of cultural, geographical, religious, ethical, and political differences** on the family structure, and explore the positive and/or negative effects families can have on individuals and society.

    1.3 <u>Current Family Trends</u>: Analyze the impact of **trends and conditions that could influence the well-being of individuals and families**, including roles and responsibilities. Research topics may include, but are not limited to the following:
        a. sandwich generation,
        b. failure to launch / boomerang,
        c. grandparents raising grandchildren,
        d. disappearing middle child,
        e. only child, and
        f. global or national events.

    1.4 <u>Historical Family Trends</u>: Describe how **demographic trends** have impacted the **family system** throughout time. Trends can include but are not limited to the following:
        a. baby boomers,
        b. increased immigration, and
        c. introduction of dual-income households.

    1.5 <u>Family Perspectives</u>: Describe **major family theoretical perspectives**. Identify whether each is macro- and/or micro-level and summarize the **strengths and limitations of each perspective**. Examples of theories can include, but are not limited to the following:
        a. structural-functionalist perspective,
        b. conflict perspective,
        c. feminist perspective,
        d. conflict perspective,
        e. ecological perspective,
        f. family development theory.
        g. symbolic interactionist perspective,
        h. social exchange perspective, and
        i. family systems perspective.

2. **Family Cycle & Relationships**

   2.1 <u>Family Life Cycle</u>: Identify the **stages of the *Family Life Cycle*** and the associated characteristics, proven stressors, and changes at each stage. Predict the effects of the stages on interpersonal relationships and family dynamics.

   2.2 <u>Intrapersonal and Interpersonal Conditions</u>: Identify **intrapersonal and interpersonal conditions, personal characteristics, and attitudes and behaviors** necessary for effective human relationships, exploring concepts such as:
      a. understanding of self,
      b. relationship-building skills,
      c. importance of values and goals, and
      d. intimacy.

   2.3 <u>Types of Relationships</u>: Analyze **functions and expectations of various types of relationships**, including the concepts of long-term relationships, such as love, mate selection, attachment, loneliness, and relationship dissolution. Summarize the purpose and responsibilities of dating.

   2.4 <u>Marriage Laws</u>: Examine **marriage laws** in the state, prepare a list of requirements to obtain a **marriage certificate**, and describe **legal rights** provided through marriage.

3. **Parenting Responsibilities**

   3.1 <u>Impact of Parenting Styles</u>: Examine the **impact of parenting styles on the family**. Parenting styles could include, but are not limited to the following:
      a. authoritarian,
      b. permissive, and
      c. authoritative.

   3.2 <u>Developmental Theorists and Theories</u>: Compare **research conducted by developmental theorists** and analyze the role their theories play in the development of children and families. Examples of theorists include, but are not limited to, the following:
      a. Piaget,
      b. Erikson,
      c. Bronfenbrenner,
      d. Gardner,
      e. Kohlberg,
      f. Vygotsky,
      g. Freud, and
      h. Skinner.

   3.3 <u>Impact of Parenting Practices</u>: Evaluate p**arenting practices that maximize human growth and development**. Identify ways to promote and foster a **child's positive self-concept**.

Identify **positive guidance techniques**, linking each to a specific reason for child misbehavior, such as desire for attention, embarrassment, lack of expectations, etc.

3.4 Adoption and Fostering: Investigate the **adoption and fostering process nationally and globally**. Compare and contrast the costs and benefits of each adoption process. Identify local and global agencies that are available for assistance during the adoption process.

4. Family Stress, Crisis, and Resilience

4.1 Family Crises: Investigate **types of crises impacting families**, such as unemployment, child exceptionality, divorce, and death, describing **characteristics of crisis situations**. Research theories and strategies for helping families deal productively with crises, making a recommendation for a specific activity that can be used to assist families in crisis situations.

4.2 Social Issues: Research **issues associated with inequality**. Analyze how **social issues impact the family** as a system and develop strategies to promote social mobility.

4.3 Conflict Prevention and Management: Evaluate effective **conflict prevention and management techniques**. Analyze how the *Cycle of Power* and *Cycle of Violence* impact the family, community, and career.

4.4 Social Service Agencies: Investigate local and national **social welfare agencies**, past and present, and the **services they provide**. Describe the theories and concepts that have formed today's social service practices.

4.5 Stages of Grief: Identify the most commonly listed **stages of the grief model**. Research each stage of the model, the definition of each stage, the emotions, physical actions, and ways to cope associated with each stage:
   a. shock and denial,
   b. pain and guilt,
   c. anger and bargaining,
   d. depression, reflection, and loneliness,
   e. upward turn,
   f. reconstruction and working through, and
   g. acceptance and hope.

Standards Alignment Notes

*References to other standards include:
- FACS: National Standards for Family and Consumer Sciences Education, Second Edition: National Association of State Administrators of Family and Consumer Sciences, FACS.
- P21: Partnership for 21st Century Skills Framework for 21st Century Learning

- Note: While not all standards are specifically aligned, teachers will find the framework helpful for setting expectations for student behavior in their classroom and practicing specific career readiness skills.

Introduction to Social Health

Primary Career Cluster:	Human Services
Course Contact:	CTE.Standards@tn.gov
Course Code:	C19X00
Prerequisite:	None
Credit:	N/A
Grade Level(s):	5-8
Program of Study (POS) Concentrator:	N/A
Programs of Study and Sequence:	This course serves as a middle school primer for all programs of study in the Human Services and Education and Training career clusters.
Aligned Student Organization:	Family, Career and Community Leaders of America (FCCLA): http://www.tennesseefccla.org
Coordinating Work-Based Learning:	Teachers are encouraged to use embedded WBL activities such as informational interviewing, job shadowing, and career mentoring. For information, visit https://www.tn.gov/education/educators/career-and-technical-education/work-based-learning.html.
Promoted Tennessee Student Industry Credentials:	Credentials are aligned with postsecondary and employment opportunities and with the competencies and skills that students acquire through their selected program of study. For a listing of promoted student industry credentials, visit https://www.tn.gov/education/educators/career-and-technical-education/student-industry-certification.html
Teacher Endorsement(s):	001, 050, 051, 101, 154, 400, 401, 402, 440, 450, 499, 954
Required Teacher Certifications:	None
Required Teacher Training:	None
Teacher Resources:	https://www.tn.gov/education/educators/career-and-technical-education/career-clusters/cte-cluster-human-services.html Best for All Central: https://bestforall.tnedu.gov

Course at a Glance

CTE courses provide students with an opportunity to develop specific academic, technical, and 21st-century skills necessary to be successful in careers and life. In pursuit of ensuring every student in

Tennessee achieves this level of success, we begin with rigorous course standards that feed into intentionally designed programs of study.

Students engage in industry-relevant content through general education integration and experiences such as career & technical student organizations (CTSO) and work-based learning (WBL). Through these experiences, students are immersed with industry-standard content and technology, solve industry-based problems, meaningfully interact with industry professionals, and use/produce industry-specific, informational texts.

Using a Career and Technical Student Organization (CTSO) in Your Classroom

CTSOs are a great resource to put classroom learning into real-life experiences for students through classroom, regional, state, and national competitions, and leadership opportunities. Below are CTSO connections for this course; note this is not an exhaustive list.

- Participate in the CTSO Fall Leadership Conference to engage with peers by demonstrating logical thought processes and developing industry-specific skills that involve teamwork and project management.
- Participate in contests such as Career Investigation, Interpersonal Communication, Promote and Publicize FCCLA, and Job Interview.
- Participate in leadership activities such as National Programs in Action, Parliamentary Procedure, Entrepreneurship, and Chapter Service Project Display and Portfolio.

Using Work-Based Learning (WBL) in Your Classroom

Sustained and coordinated activities related to the course content are the key to successful work-based learning. Possible activities for this course include the following. This is not an exhaustive list.

- **Standards 1.1-1.7**|Visit the school cafeteria to learn about school lunch nutrition or invite a registered dietitian for discussion of healthy lifestyles.
- **Standards 2.1-3.4**| Invite a youth therapist to discuss social-emotional development and relationships.
- **Standards 4.1-4.3|** Participate in a panel discussion about different career opportunities.
- **Standards 5.1-5.3 |** Invite a financial planner or bank officer to discuss smart financial decisions.
- **Standards 6.1-6.2 |** Invite a law enforcement officer to discuss safe social media use.

Course Description

Introduction to Social Health is a foundational middle school course in the Education & Training and Human Services clusters. Upon completion of this course, a proficient student will understand t h e components of healthy lifestyles and relationships, communication skills, relationship development, technology uses, and career exploration.

Course Standards

1. **Healthy Lifestyles**

    1.1 <u>Wellness Activities</u>: Analyze the **relationship among eating, sleeping, physical activity, and wellness**. Assess **nutrition and fitness practices** that promote personal well-being across the lifespan.

    1.2 <u>Nutrients</u>: Describe the **body's use of nutrients** and identify **nutritional food sources**. Cite current **nutrition guidelines** to classify foods and identify recommended servings.

    1.3 <u>Food Labels</u>: Read and evaluate **food label information**; compare and contrast the nutrition of various **snacks and fast food** and use this information to create a **well-balanced menu** plan for adolescents.

    1.4 <u>Food and Equipment Safety</u>: Demonstrate **safe food and equipment handling procedures** while preparing healthful snacks. Create an informational artifact explaining the nutritional value of the snacks.

    1.5 <u>Physical Fitness</u>: Compare and contrast **aerobic and anaerobic physical fitness activities**. Develop a plan for participating in either **team or individual activities** that provide **physical benefits**, along with daily practices requiring no special equipment.

    1.6 <u>Consequences of High-Risk Behaviors</u>: Identify the **consequences and long-term outcomes** related to **high-risk** behaviors such as tobacco use, vape use, alcohol use, and other drug use.

    1.7 <u>Personal Values and High-Risk Behaviors</u>: Describe **how personal values can lead to abstinence or perpetuate high-risk behavior,** such as tobacco use, vape use, alcohol use, and other drug use. Identify and demonstrate **resistance and refusal skills for risky behavior** such as tobacco use, vape use, alcohol use, and other drug use.

2. **Lifespan Development**

    2.1 <u>Domains and Stages of Human Development</u>: Identify the **eight major stages of human development.** Describe the **three major domains of development** (physical, cognitive, and psychosocial), and give an example of each. Then describe **how the domains of development are interrelated.**

2.2 <u>Puberty and Adolescent Development</u>: Research and outline the **physical, cognitive, and emotional-social development** that occurs in puberty and adolescence. Work in a small group to create a presentation to present to the class.

3. **Healthy Relationships & Communications**

   3.1 <u>Relationships</u>: Analyze the different **types of relationships and the characteristics of each**. Compare and contrast **healthy and unhealthy relationships** by addressing issues, including but not limited to, the need for trust, respect, and emotional support vs. bullying (cyberbullying), and verbal, physical, and emotional abuse.

   3.2 <u>Crisis and Conflict Management</u>: Examine **methods of coping with personal and family change or crisis**. Evaluate positive **parent-child and sibling communication**. Explore conflict management, negotiation, problem-solving, and anger-control strategies. Research and compile a list of resources (e.g., counseling, hotlines, support groups, etc.) for help in challenging circumstances.

   3.3 <u>Communication</u>: Practice **giving and receiving instructions to accomplish a complex task**. Articulate and convey situations related to school, relationships, and family. Practice **active listening** and appropriate **"I" statements**.

   3.4 <u>Poor Communication Skills</u>: Recognize the **consequences of poor communication skills** and describe the importance of good communication between team members.

4. **Career Exploration**

   4.1 <u>Career Survey</u>: Complete one or more **career-choice survey instruments**. Evaluate personal interests, traits, abilities, and goals to maximize future educational and career opportunities.

   4.2 <u>Career Clusters</u>: Research one of the **sixteen nationally recognized career clusters** and identify three to five **possible careers in that cluster**. Determine the knowledge, skills, and attributes associated with the occupations. Compare and contrast the educational and licensing requirements for obtaining a position and for career advancement.

   4.3 <u>Employability Skills</u>: Research and demonstrate **employability skills**, such as working in a group, problem-solving, and organizational skills. Differentiate between **hard and soft skills** and describe the importance of soft skills in the workplace and the classroom.

5. **Resource Management**

   5.1 <u>Goals</u>: Research the different types of goals and list the different characteristics of each. Create **SMART goals** (such as postsecondary education and car ownership) and **explore logical strategies for achieving them**.

   5.2 <u>Money Management</u>: Describe **money management concepts** and their relationship to achieving age-appropriate goals.

   5.3 <u>Time Management</u>: Create a **time tracking system**, such as a time log, to analyze the percentage of time spent each day on broad categories such as sleeping, eating, travel, school assignments, socializing, work, family, and chores. Use the system to develop a plan for more effective use of time.

6. **Appropriate Technology Use**

   6.1 <u>Safe Technology Use</u>: Practice **responsible and safe use of technology**. Create a list of **best practices** related to computer netiquette, privacy, security, and copyright laws.

Standards Alignment Notes

*References to other standards include:

FACS: National Standards for Family and Consumer Sciences Education, Second Edition: National Association of State Administrators of Family and Consumer Sciences, <u>FACS</u>.

- P21: Partnership for 21st Century Skills <u>Framework for 21st Century Learning</u>
  - o   Note: While not all standards are specifically aligned, teachers will find the framework helpful for setting expectations for student behavior in their classroom and practicing specific career readiness skills.