

Early Childhood Education Careers I (ECEC I)

Primary Career Cluster:	Human Services
Consultant:	Deborah Thompson, (615)-532-2840, Deborah.Thompson@tn.gov
Course Code(s):	6015
Prerequisite(s):	None
Credit:	1
Grade Level:	9
Graduation Requirements:	This course satisfies one credit of three credits required for an elective focus when taken in conjunction with other Human Services courses.
Programs of Study and Sequence:	This is the first course in the <i>Childhood Development Services</i> program of study.
Necessary Equipment:	None
Aligned Student Organization(s):	Family, Career and Community Leaders of America (FCCLA): http://www.tennesseefccla.org/ Brandon Hudson, (615) 532-2804, Brandon.Hudson@tn.gov
Coordinating Work-Based Learning:	If a teacher has completed work-based learning training, appropriate student placement can be offered. To learn more, please visit http://tennessee.gov/education/cte/wb/ .
Available Student Industry Certifications:	American Association of Family and Consumer Sciences Pre-PAC Early Childhood Education Certificate
Dual Credit or Dual Enrollment Opportunities:	There are no dual credit /dual enrollment opportunities for this course.
Teacher Endorsement(s):	(050 and 058), (050 and 451), (051 and 058), (051 and 451), (450 and 058), (450 and 451)
Required Teacher Certifications/Training:	Teachers supervising a school-sponsored enterprise must complete the state-approved work-based learning training.
Teacher Resources:	http://www.state.tn.us/education/cte/HumanServices.shtml

Course Description

Early Childhood Education Careers I (ECEC I) is a foundational course in the Human Services career cluster. Careers in early childhood education include but are not limited to childcare providers, nannies, and preschool teachers. This course studies the foundation of childhood development services, careers, provider responsibilities and aptitudes, and fundamentals of child development. Students will create a course portfolio. Standards in this course are aligned with Tennessee Common Core State Standards for English Language Arts & Literacy in Technical Subjects and Tennessee state standards for Biology I,

Psychology, and Sociology, as well as the National Standards for Family and Consumer Sciences Education, Second Edition.*

Program of Study Application

This course is the foundational course in the *Childhood Development Services* program of study. For more information on the benefits and requirements of implementing this program in full, please visit the Human Services website at http://www.state.tn.us/education/cte/HumanServices.shtml.

Course Standards

Foundations of Childhood Development Services

- Formulate a hypothesis about the relationship between early childhood education and a student's future success. Gather research from academic journals and news articles and craft an argumentative essay supporting or refuting the hypothesis with specific textual evidence. (TN CCSS Reading 1, 8; TN CCSS Writing 1, 8)
- 2) Research and summarize the influences of major educational theorists' philosophies. Evaluate the extent to which the reasoning and evidence presented by the theorists supported their claims. Examples of theorists include:
 - a. John Dewey
 - b. Maria Montessori
 - c. Abraham Maslow
 - d. Benjamin Bloom

(TN CCSS Reading 1, 2, 8; TN CCSS Writing 2, 7, 8; FACS 4)

- 3) Cite specific textual evidence to compare and contrast various types of early childhood care services in a graphic organizer, chart, or table. Include information about relevant regulations and licensure requirements. Example programs/providers include, but are not limited to:
 - a. Preschool
 - b. Nannies
 - c. Montessori
 - d. Head Start
 - e. Day care centers
 - f. Laboratory schools

(TN CCSS Reading 1, 9; TN CCSS Writing 2, 9; FACS 4)

Childhood Development Careers

- 4) Use local job postings and national labor and workforce data to identify and describe essential knowledge and skills for careers within the childcare field. Complete one or more career interest surveys, analyze the results, and write a summary of the results. Compare the survey results with earlier research findings on essential knowledge and skills for providers. (TN CCSS Reading 1, 9; TN CCSS Writing 2, 7, 8, 9; FACS 4)
- 5) Compile and analyze real-time labor market data, including economic and demographic trends, and compare with authentic vacancy announcements on local and national job boards. Use this



information to compare and contrast occupations by education requirements, job availability, salaries, and benefits. (TN CCSS Writing 8, 9; FACS 4)

Provider Responsibilities and Aptitudes

- 6) Identify daily tasks of child development service providers through observation, first-hand experience, or online research. Categorize each of the tasks and estimate the time spent on each category of task. Write clear narratives exploring multiple facets of common provider activities, including but not limited to:
 - a. Planning effective instruction
 - b. Meeting the physical needs of children
 - c. Supervising children
 - d. Non-instructional activities (such as parent communication, site maintenance, etc.) (TN CCSS Reading 1, 2; TN CCSS Writing 4, 8; FACS 4)
- 7) Research professional ethical standards from recognized professional organizations, such as the National Association for the Education of Young Children (NAEYC) and the National Association of Child Care Professionals (NACCP). Synthesize principles from the standards to create a personal code of ethics. (TN CCSS Reading 1, 2; TN CCSS Writing 4, 8, 9)
- 8) Describe personal characteristics and aptitudes, including 21st century skills, needed by childcare providers. Create a rubric for self-assessing 21st century skills, such as the ability to:
 - a. Communicate verbally and nonverbally in a respectful manner with children, parents, and colleagues
 - b. Work effectively in teams and resolve conflicts when necessary
 - c. Demonstrate a positive work ethic
 - d. Understand different cultural perspectives and their impact in the classroom;
 - e. Use instructional technology appropriately
 - f. Adapt to changes
 - g. Manage time and resources wisely
- 9) Use the self-assessment rubric created during this course to establish a baseline evaluation of 21st century skills, attitudes, and work habits. Working from the baseline, create a growth plan promoting advancement of skills and abilities to place in the career portfolio. (TN CCSS Writing 4; FACS 4)

Introduction to Child Development

- 10) Create an annotated model or graphic illustration to describe the parts and functions of the human brain. Create a brain development timeline from birth through age eight. (TN CCSS Reading 3, 7; TN CCSS Writing 4, 9; FACS 12)
- 11) Draw conclusions about the most important influences on and relationships between brain development, reasoning capacity, and learning. Define brain plasticity and describe how it changes over the lifespan. Brain anatomy for research includes: frontal, parietal, occipital, and temporal lobes; brain stem, cerebellum, cerebral cortex, and limbic system. (TN CCSS Reading 1, 4, 9; TN Biology I 4; TN Psychology; FACS 12)



- 12) Using relevant information from multiple print and electronic resources, compare and contrast the "ages and stages" identified by influential child development theorists. Formulate a hypothesis about the relationship between child development and how children learn and cite textual evidence to support the hypothesis. Examples of child development theories include, but are not limited to:
 - a. Erikson's psychosocial stage theory
 - b. Kohlberg's moral understanding stage theory
 - c. Piaget's cognitive development stage theory
 - d. Bronfenbrenner's ecological systems theory

(TN CCSS Reading 1, 2, 8; TN CCSS Writing 1, 4, 8, 9)

- 13) Analyze the factors that contribute to personality, and investigate several research-based personality assessment tools. Use textual evidence to support the analysis. Reflect on the connections between personality, life experience, environment, and brain development. (TN CCSS Reading 1; TN CCSS Writing 7; TN Psychology; FACS 12)
- 14) Examine the Tennessee Early Childhood Education Early Learning Developmental Standards.

 Summarize the major developmental milestones and create a graphic illustrating the continuum of development from birth through age five in these domains:
 - a. Speech and Language Development
 - b. Early Literacy
 - c. Math and Science
 - d. Social Studies
 - e. Creative Arts
 - f. Social and Emotional Development
 - g. Physical Development

(TN CCSS Reading 1, 2, 7; TN CCSS Writing 2, 4; TN Psychology; TN Sociology; FACS 4)

15) Research assessment methods used to observe and interpret children's growth and development. Identify risk factors, delays, or disabilities that may indicate a need for special services. (TN CCSS Reading 1, 2; TN Psychology; TN Sociology; FACS 12)

Introduction to Learning

- 16) Analyze NAEYC's 12 Principles of Child Development and Learning and additional relevant documents to explain how the principles serve as the foundation for implementing developmentally appropriate practices (DAP) that promote young children's optimal learning. (TN CCSS Reading 1, 2, 4; FACS 4)
- 17) Synthesize academic research to describe and critique major approaches to theories of human learning:
 - a. Behaviorism
 - b. Cognitive psychology
 - c. Social learning theory
 - d. Constructivism
 - e. Experiential learning
 - f. Multiple intelligences



Write an argumentative essay that develops a claim about how a major educational theory of learning has impacted modern practice of supervising or instructing young children. (TN CCSS Reading 1, 4; TN CCSS Writing 1, 7, 8, 9; TN Psychology; TN Sociology)

- 18) Compare and contrast research on the influence of the following factors on student self-concept and learning:
 - a. Student experiences, interests, aptitudes
 - b. Family and culture
 - c. Teacher/Caregiver behavior and attitudes
 - d. Peers

(TN CCSS Reading 1, 2, 9; TN Psychology; TN Sociology; FACS 12)

Career Portfolio

- 19) Create a course portfolio, using writing and visual elements to connect personal career preparation artifacts to concepts learned in this course. (TN CCSS Writing 2, 4, 6; FACS 4)
- 20) Synthesize information from Child Development Services career exploration to create a written or electronic career pathway plan that outlines academic and career achievement goals and a timeline for ongoing reflection throughout the program of study coursework.
 - a. Identify dual credit courses available within specific programs of study
 - b. Gather information from postsecondary institution websites and compare community college, Tennessee Colleges of Applied Technology, and university education programs that align with secondary programs of study

(TN CCSS Reading 7; TN CCSS Writing 2, 4, 6, 8; FACS 4)

21) Drawing upon content in this course, write a clear and coherent definition of a *teaching philosophy*, argue its significance to student learning, and create a personal teaching philosophy for inclusion in the professional portfolio. (TN CCSS Reading 1; TN CCSS Writing 1, 4, 6, 9)

The following artifacts will reside in the student's portfolio:

- o Foundations of Human Development artifacts
- o Career and Interest Survey artifacts
- o Code of Ethics
- o 21st Century Skills Rubric
- Brain artifacts and model
- Child Development Theorist research
- Tennessee Early Childhood Education Early Learning Development Standard artifact
- o Human Development narrative
- o Career Cluster Pathway Plan artifact
- Personal Teaching Philosophy



Standards Alignment Notes

*References to other standards include:

- TN CCSS Reading: <u>Tennessee Common Core State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects</u>; Reading Standards for Literacy in Science and Technical Subjects 6-12; Grades 9-10 Students (page 62).
 - Note: While not directly aligned to one specific standard, students that are engaging in activities outlined above should be able to also demonstrate fluency in Standards 5, 6, and 10 at the conclusion of the course.
- TN CCSS Writing: <u>Tennessee Common Core State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects</u>; Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects 6-12; Grades 9-10 Students (pages 64-66).
 - Note: While not directly aligned to one specific standard, students that are engaging in activities outlined above should be able to also demonstrate fluency in Standards 3, 5, and 10 at the conclusion of the course.
- TN Biology: Tennessee Science: <u>Biology I</u> standard 4 may provide additional insight and activities for educators.
- TN Psychology: Tennessee Social Studies: <u>Psychology 9-12</u> standards may provide additional insight and activities for educators.
- TN Sociology: Tennessee Social Studies: <u>Sociology 9-12</u> standards may provide additional insight and activities for educators.
- 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.





Early Childhood Education Careers II (ECEC II)

Primary Career Cluster:	Human Services
Consultant:	Deborah Thompson, (615)-532-2840, Deborah.Thompson@tn.gov
Course Code(s):	TBD
Prerequisite(s):	Fundamentals of Education (TBD) or Early Childhood Education Careers I (6015)
Credit:	1
Grade Level:	10
Graduation Requirements:	This course satisfies one credit of three credits required for an elective focus when taken in conjunction with other Education and Training or Human Services courses.
Programs of Study and Sequence:	This is the second course in both the Early Childhood Education and Childhood Development Services programs of study.
Necessary Equipment:	None
Aligned Student Organization(s):	Family, Career and Community Leaders of America (FCCLA): http://www.tennesseefccla.org/ Brandon Hudson, (615) 532-2804, Brandon.Hudson@tn.gov
Coordinating Work-Based Learning:	If a teacher has completed work-based learning training, an appropriate student placement can be offered. Visit http://tennessee.gov/education/cte/wb/ to learn more.
Available Student Industry Certifications:	American Association of Family and Consumer Sciences Pre-PAC Early Childhood Education Certificate
Dual Credit or Dual Enrollment Opportunities:	There are no dual credit/dual enrollment opportunities for this course.
Teacher Endorsement(s):	(050 and 058), (050 and 451), (051 and 058), (051 and 451), (450 and 058), (450 and 451)
Required Teacher Certifications/Training:	Teachers supervising a school-sponsored enterprise must complete the state-approved work-based learning training.
Teacher Resources:	http://www.state.tn.us/education/cte/HumanServices.shtml

Course Description

Early Childhood Education Careers II (ECEC II) is an applied knowledge course for students interested in learning more about becoming an early childhood teacher, nanny, or childcare provider. This course covers the components of curriculum planning, learning, screening and assessing, special populations, and educational technology. Students in this course will observe educators in action, practice specific

skills, and add personal work products to a course portfolio. Standards in this course are aligned with Tennessee Common Core State Standards for English Language Arts & Literacy in Technical Subjects and Tennessee Psychology and Sociology standards, and National Standards for Family and Consumer Sciences Education, Second Edition.*

Program of Study Application

This course is an applied knowledge course in each of the following programs of study. For more information on the benefits and requirements of implementing these programs in full, please visit the respective career cluster websites.

- Early Childhood Education- http://www.state.tn.us/education/cte/EducationTraining.shtml
- Childhood Development Services- http://www.state.tn.us/education/cte/HumanServices.shtml

Course Standards

Curriculum or Activity Planning

- 1) Research and analyze informational texts to identify components of developmentally appropriate instruction for children from birth through age eight. Compare and contrast components of curriculum planning models, including but not limited to the following:
 - a. Bank Street developmental-interaction approach
 - b. Dodge creative curriculum for preschool
 - c. High/Scope curriculum
 - d. Kamii-DeVries constructivist approach
 - e. Montessori method
 - f. Direct instruction mode.

(TN CCSS Reading 4, 9; TN CCSS Writing 8, 9; FACS 4)

- 2) Create an annotated graphic illustrating the stages of human development from birth through age eight and the corresponding activities that support physical, emotional, social, and intellectual development at each stage. (TN CCSS Reading 1, 7, 9; TN CCSS Writing 2, 8, 9; TN Psychology; FACS 4, 12)
- 3) Research the characteristics of the stages of play development. Draw conclusions about the relationship between play and child development and learning. Synthesize the research to write recommendations for developmentally appropriate time, structure, materials, and equipment for play within an early childhood care program. (TN CCSS Reading 2; TN CCSS Writing 1, 7, 9; TN Psychology)
- 4) Citing specific textual evidence found in academic journals or research, defend the need for the preparation of a comprehensive curriculum for children from birth through age eight. Address the developmental significance of including the following in a curriculum:
 - a. Music
 - b. Art
 - c. Role-play
 - d. Reading
 - e. Storytelling



- f. Outdoor excursions
- g. Games

(TN CCSS Reading 1; TN CCSS Writing 1; TN Psychology; FACS 4)

Learning

- 5) Using academic journals and news articles, investigate how social, cultural, and economic factors inside and outside of the classroom influence student learning and student behavior. Assess the extent to which reasoning and evidence support the author's claim, citing specific textual evidence. (TN CCSS Reading 1, 8; TN Psychology 1, 6; TN Sociology 1, 6; FACS 4, 12)
- 6) Compare and contrast a range of learning styles identified in relevant education research. Synthesize information about the characteristics of each learning style, such as examples of teaching methods, and assignments in an informative text, graphic organizer, or other illustration. Learning styles include:
 - a. Visual/Spatial Learners
 - b. Auditory/Verbal/Linguistic Learners
 - c. Analytic Learners
 - d. Kinesthetic or Tactile Learners
 - e. Global Learners

(TN CCSS Reading 2, TN Psychology 1; TN Sociology 1; FACS 4, 12)

Screening and Assessment

- 7) Differentiate between child screening, assessment, and evaluation. Collect firsthand data through interviews with local child care providers to identify the most common assessment processes used. Citing specific textual evidence, describe the purpose and procedures associated with common types of assessments, including:
 - a. Continuous
 - b. Developmental
 - c. Diagnostic
 - d. Family
 - e. Multidisciplinary
 - f. Play-based
 - g. Readiness

(TN CCSS Reading 1, 9; TN CCSS Writing 2, 8)

- 8) Prepare a narrative to demonstrate understanding of the role of the provider in screening infants and children. Create a checklist of simple activities that a provider can use with children from birth to age eight to screen for achievement of significant developmental milestones. (TN CCSS Reading 1; TN CCSS Writing 2, 4)
- 9) Compare and contrast the instruments currently available to assess what children know, understand, and are able to do within the physical, social, emotional, and cognitive development domains. Assessment instruments include but are not limited to the:
 - a. Ages and Stages Questionnaire
 - b. Battelle Developmental Inventory Screening Test
 - c. Birth to Three Assessment and Intervention System



- d. Checklist for Autism in Toddlers
- e. Denver Developmental Screening II
- f. Devereux Early Childhood Assessment
- g. Parents Evaluation of Developmental Status (PEDS) test
- h. Temperament and Atypical Behavior Scale

(TN CCSS Reading 9; FACS 12)

Special Populations

- 10) Research the Individuals with Disabilities Education Act (IDEA), Section 504 of the Rehabilitation Act of 1973 and Americans with Disabilities Act (ADA). Summarize the broad categories that IDEA identifies as disabilities and describe general eligibility requirements. Write an analysis of the impact of this legislation on the education of students with special needs. (TN CCSS Reading 1, 2; TN CCSS Writing 2, 4, 7, 9)
- 11) Investigate the roles of parents, teachers, and administrators at an Admission, Review and Dismissal (ARD) meeting and create a visual representation of the ARD process. Examine examples of authentic individualized education programs (IEPs) designed to address the needs of children with disabilities and analyze how the required adaptations and accommodations vary from standard developmentally appropriate practices. (TN CCSS Reading 2, 3, 7; TN CCSS Writing 2, 4, 7, 9)
- 12) Draw evidence from informational texts to define special populations and write a narrative describing the characteristics of special needs children and accommodations recommended for those who have:
 - a. Intellectual and developmental disabilities
 - b. Emotional or behavioral disorders
 - c. Communications disorders, deafness, and hearing loss
 - d. Blindness and low vision
 - e. Physical disabilities
 - f. Gifted and talented designation

(TN CCSS Reading 1, 4; TN CCSS Writing 2, 4, 9; TN Psychology; TN Sociology)

Educational Technology

- 13) Drawing evidence from research, develop a logical argument to support how technology can enhance or inhibit the development and learning processes of children from birth to age eight. Create a graphic illustrating developmentally appropriate technology through the ages and stages. (TN CCSS Reading 1; TN CCSS Writing 1, 4, 7, 9; TN Psychology; TN Sociology; FACS 4, 12)
- 14) Research the Children's Internet Protection Act (CIPA) from the Federal Communication Commission (FCC) and other informational texts on internet safety for students. Synthesize the research to create acceptable-use policies for students that are appropriate at different developmental milestones. (TN CCSS Reading 2; TN CCSS Writing 2, 4, 7, 9)



Final Project

15) Create a checklist or rubric synthesizing concepts learned in ECEC I and ECEC II to use as a classroom observation tool. Perform guided observations at the preschool and elementary levels to identify characteristics of an effective classroom and teacher. Write an essay reflecting on the observation experience and revise written career goals and a personal teaching philosophy (developed in ECEC I). Update the print or electronic portfolio, including writing and visual elements to connect observations from the final project to concepts learned in this course. (TN CCSS Writing 2, 4, 5, 6, 7)

The following artifacts will reside in the student's portfolio:

- o Revised career pathway plan and timeline for achieving academic and career goals
- o Revised personal teaching philosophy
- Reflection essay based on observations from the final project

Standards Alignment Notes

*References to other standards include:

- TN CCSS Reading: <u>Tennessee Common Core State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects</u>; Reading Standards for Literacy in Science and Technical Subjects 6-12; Grades 9-10 Students (page 62).
 - Note: While not directly aligned to one specific standard, students that are engaging in activities outlined above should be able to also demonstrate fluency in Standards 5, 6, 8, and 10 at the conclusion of the course.
- TN CCSS Writing: <u>Tennessee Common Core State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects</u>; Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects 6-12; Grades 9-10 Students (pages 64-66).
 - Note: While not directly aligned to one specific standard, students that are engaging in activities outlined above should be able to also demonstrate fluency in Standards 3 and 10 at the conclusion of the course.
- TN Psychology: Tennessee Department of Education Curriculum Standards, Secondary 9-12 Social Studies, <u>Psychology</u> 9-12.
- TN Sociology: Tennessee Department of Education Curriculum Standards, Secondary 9-12 Social Studies, Sociology 9-12.
- 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>
 - 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.





Early Childhood Education Careers III (ECEC III)

Primary Career Cluster:	Human Services
Consultant:	Deborah Thompson, (615)-532-2840, Deborah.Thompson@tn.gov
Course Code(s):	6017
Prerequisite(s):	Early Childhood Education Careers I (6015) and Early Childhood Education Careers II (6016)
Credit:	1
Grade Level:	11
Graduation Requirements:	This satisfies one of three credits required for an elective focus when taken in conjunction with other Human Services courses.
Programs of Study and Sequence:	This is the third course in <i>the Childhood Development Services</i> program of study.
Necessary Equipment:	None
Aligned Student Organization(s):	Family, Career, and Community Leaders of America (FCCLA): http://www.tennesseefccla.org/ Brandon Hudson, (615) 532-2804, Brandon.Hudson@tn.gov
Coordinating Work-Based Learning:	If a teacher has completed work-based learning training, appropriate student placement can be offered. Visit http://tennessee.gov/education/cte/wb/ to learn more.
Available Student Industry Certifications:	American Association of Family and Consumer Sciences Pre-PAC Early Childhood Education Certificate, Child Development Associate (CDA), and Tennessee Early Childhood Training Alliance (TECTA) certification.
Dual Credit or Dual Enrollment Opportunities:	There are no current dual credit/dual enrolment opportunities for this course. If interested in developing, reach out to a local postsecondary institution to establish an articulation agreement.
Teacher Endorsement(s):	(050 and 058), (050 and 451), (051 and 058), (051 and 451), (450 and 058), (450 and 451)
Required Teacher Certifications/Training:	Teachers supervising a school-sponsored enterprise must complete the state-approved work-based learning training.
Teacher Resources:	http://www.state.tn.us/education/cte/HumanServices.shtml

Course Description

Early Childhood Education Careers III (ECEC III) is an applied knowledge course for students interested in learning more about becoming an early childhood teacher, nanny, or childcare provider. This course covers the components of the learning environment, planning age appropriate activities, using activities for learning, and developing communication skills. Students in this course will participate in a work-

based learning component of instruction and add work products to a course portfolio. Standards in this course are aligned with Tennessee Common Core State Standards for English Language Arts & Literacy in Technical Subjects and Tennessee Psychology, Scientific Research, and Sociology standards and the National Standards for Family and Consumer Sciences Education, Second Edition.*

Program of Study Application

This course is an applied knowledge course in the *Childhood Development Services* program of study. For more information on the benefits and requirements of implementing this program in full, please visit the Human Services website at http://www.state.tn.us/education/cte/HumanServices.shtml.

Course Standards

Managing the Care Environment

- 1) Drawing on evidence from informational texts, create a rubric for evaluating the establishment of a positive early childhood environment, including indicators such as visual appearance of the environment, playground equipment safety, child engagement, and provider interaction with children and their parents/guardians. (TN CCSS Reading 1; TN CCSS Writing 2, 7; FACS 4)
- 2) Interview educators to review the results of a site's most recent evaluation under current state regulations, which rates child care facilities based on:
 - a. Director qualifications (for child care centers)
 - b. Professional development
 - c. Developmental learning
 - d. Parent/family involvement
 - e. Ratio and group size (for child care centers)
 - f. Business managements (for family and group child care homes)
 - g. Staff compensation (for child care centers)
 - h. Program assessment

(TN CCSS Reading 1; TN CCSS Writing 2, 9)

- 3) Research the correlation between physical layout (including the use of learning centers for a variety of activities) and effective care environment management. Compare the use of furniture and space in several environments and analyze their compliance with research-based recommendations for layout and with specified legal requirements, including health and safety guidelines. (TN CCSS Reading 1, 8, 9; TN CCSS Writing 2, 4, 7, 9; FACS 4)
- 4) Interview educators and/or providers and create a checklist for performing classroom procedures and for responding to emergency situations, including but not limited to recognizing possible child welfare issues, following fire drills and other natural disaster protocols, and responding to intruder alerts. (TN CCSS Writing 2, 4, 7)
- 5) Research common reasons for misbehavior in children aged two to eight and cite evidence to support development of a written behavior policy to share with parents. From this information, create a graphic illustration demonstrating expected positive behaviors and the appropriate rewards/consequences for use with children to guide behavior at each age level. (TN CCSS Reading 1, 2, 7; TN CCSS Writing 2, 4, 7, 9; FACS 4)



- 6) Citing specific textual evidence from research on the developmental stages of children, plan and implement (as part of the final project) a schedule for each age from birth to age eight that incorporates the appropriate amounts of physical activity and quiet time; individual, small group, and large group experiences; and child-initiated and adult-led activities. (TN CCSS Reading 1, 3; FACS 4)
- 7) Discuss and illustrate modifications to the physical environment to accommodate students with disabilities. (TN CCSS Reading 2, 7)

Caring for Young Children

- 8) Research and synthesize informational texts to determine the characteristics of communicable childhood diseases. Compare and contrast via a table, chart, or graphic annotated with:
 - a. Disease name
 - b. Symptoms
 - c. Transmission methods
 - d. Incubation period
 - e. Prevention strategies
 - f. Required immunizations (Tennessee Department of Health Rule 1200-14-1-.29)
 - g. Decision tree or flow chart for admitting sick child

(TN CCSS Reading 1, 7; TN CCSS Writing 2, 4, 9, FACS 4)

- 9) Identify, practice, and demonstrate appropriate procedures for meeting developmentally appropriate physical needs of children, including but not limited to:
 - a. Hygiene
 - b. Rest
 - c. Safety
 - d. Hydration and nutrition
 - e. Appropriate dress
 - f. First-aid and CPR

(TN CCSS Reading 2, 3; TN Psychology)

10) Analyze case studies of provider reactions to children in specific challenging situations. Write a narrative describing the consequences of these behaviors and comparing them to the personal code of ethics developed in ECEC I. (TN CCSS Reading 2, 8, 9; TN CCSS Writing 2, 9)

Planning Developmentally Appropriate Learning Activities

- 11) Drawing evidence from academic research, create a rubric for evaluating and selecting developmentally appropriate books, materials, toys, and technology resources by age. Examples of criteria to be analyzed include but are not limited to:
 - a. Age and developmental level
 - b. Safety
 - c. Visual and tactile appeal
 - d. Promotion of learning through play, exploration, or interaction
 - e. Adaptability for differently-abled children
 - f. Durability



g. Non-stereotyped representation of groups from different cultures or ethnic backgrounds

(TN CCSS Reading 1; TN CCSS Writing 4, 9; Psychology; Sociology; FACS 4, 12)

- 12) Conduct a short research project on lesson planning for multiple developmental levels.

 Demonstrate knowledge of the relationship between subject areas (such as music, language, etc.) to stimulate growth in specific developmental domains. Describe the typical components of lesson planning documents and create a template that incorporates components such as:
 - a. Learner developmental level/age
 - b. Developmental domains addressed
 - c. Subject area
 - d. Materials and equipment needed
 - e. Learner grouping (one-on-one, small group, large group)
 - f. Instructional activities
 - g. Schedule (daily, weekly, monthly)
 - h. Accommodations for special needs students
 - i. Closure/reflection
 - j. Assessment

(TN CCSS Reading 2, 5; TN CCSS Writing 4, 7, 9; FACS 4)

- 13) Create and perform activities to screen for achievement of significant developmental milestones with children from birth to age eight, using the checklist of simple activities created in ECEC II.

 Write recommendations for working with parents when a developmental delay is suspected. (TN CCSS Writing 1, 4; FACS 4, 12)
- 14) Using instructional materials and academic research, analyze individual and group teaching strategies. Create a graphic illustration citing appropriate evidence to support those strategies that most effectively promote learning. (TN CCSS Reading 1, 2; TN CCSS Writing 8, 9)

Communication Skills (21st Century Skills)

- 15) Identify best practices for encouraging parental involvement and write clear and coherent instructions for informing parents about the educational philosophy of the center, goals for the child's development, instructional approach, and desire for ongoing communication about the parent-provider education partnership. (TN CCSS Reading 1, 2; TN CCSS Writing 4)
- 16) Demonstrate effective communication and interaction with children, including but not limited to:
 - a. Active listening
 - b. Open-ended questioning
 - c. One-on-one conversations
 - d. Group discussions (e.g., circle time)
 - e. Modeling appropriate grammar and vocabulary for the context
 - f. Acknowledging and addressing emotions

(TN CCSS Reading 2; TN CCSS Writing 4; FACS 13)



Final Project

- 17) Apply knowledge from this course and document the final project in the course portfolio. Demonstration of knowledge includes but is not limited to:
 - a. Performing simple activities to check developmental milestone attainment
 - b. Maintaining children's records
 - Using a lesson plan template to create daily activities (created in this course) and implement them with small groups, using developmentally-appropriate teaching strategies
 - d. Arranging learning centers that provide for children's exploration, discovery, and development
 - e. Selecting and using multiple resources and teaching methods
 - f. Creating a classroom floor plan designed to provide equitable access and maximize learning for all students
 - g. Evaluating student levels to adapt lessons for differentiated instruction, as needed
 - h. Establishing of a positive classroom climate
 - i. Creating opportunities for positive communication with families

The following artifacts will reside in the student's portfolio:

- o Early Childhood Environment Rubric
- o Health and Safety document
- o Classroom Procedure Checklist
- o Communicable Disease artifacts
- o Developmentally Appropriate Learning Rubric
- o Teaching Strategies graphic
- o Communication artifacts
- Behavior Graphic illustration
- Revised Career and Professional Growth Plan
- o Sample Child's Work

Standards Alignment Notes

*References to other standards include:

- TN CCSS Reading: <u>Tennessee Common Core State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects</u>; Reading Standards for Literacy in Science and Technical Subjects 6-12; Grades 11-12 Students (page 62).
 - Note: While not directly aligned to one specific standard, students that are engaging in activities outlined above should be able to also demonstrate fluency in Standards 4, 6, and 10 at the conclusion of the course.
- TN CCSS Writing: <u>Tennessee Common Core State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects</u>; Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects 6-12; Grades 11-12 Students (pages 64-66).
 - Note: While not directly aligned to one specific standard, students that are engaging in activities outlined above should be able to also demonstrate fluency in Standards 1, 3, 5, 6, 8, and 10 at the conclusion of the course.



- TN Psychology: Tennessee Department of Education Curriculum Standards, Secondary 9-12 Social Studies, Psychology 9-12.
- TN Sociology: Tennessee Department of Education Curriculum Standards, Secondary 9-12 Social Studies, <u>Sociology 9-12</u>.
- 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 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.





Early Childhood Education Careers IV (ECEC IV)

Primary Career Cluster:	Human Services
Consultant:	Deborah Thompson, (615)-532-2840, Deborah.Thompson@tn.gov
Course Code(s):	TBD
Prerequisite(s):	Early Childhood Education Careers I (6015), II (6016), and III (6017)
Credit:	1
Grade Level:	12
Graduation Requirements:	This course satisfies one of three credits required for an elective focus if taken in conjunction with other Human Services courses.
Programs of Study and Sequence:	This is the fourth course in the <i>Childhood Development Services</i> program of study.
Necessary Equipment:	None
Aligned Student Organization(s):	Family, Career, and Community Leaders of America (FCCLA): http://www.tennesseefccla.org/ Brandon Hudson, (615) 532-2804, Brandon.Hudson@tn.gov
Coordinating Work-Based Learning:	If a teacher has completed work-based learning training, appropriate student placement can be offered. For more information, visit http://tennessee.gov/education/cte/wb/ .
Available Student Industry Certifications:	American Association of Family and Consumer Sciences Pre-PAC Early Childhood Education Certificate, Child Development Associate (CDA), and Tennessee Early Childhood Training Alliance (TECTA) certification.
Dual Credit or Dual Enrollment Opportunities:	There are no known dual credit/dual enrolment opportunities for this course. If interested, contact a local postsecondary institution to establish an articulation agreement.
Teacher Endorsement(s):	(050 and 058), (050 and 451), (051 and 058), (051 and 451), (450 and 058), (450 and 451)
Required Teacher Certifications/Training:	Teachers supervising a school-sponsored enterprise must complete the state-approved work-based learning training.
Teacher Resources:	http://www.state.tn.us/education/cte/HumanServices.shtml

Course Description

Early Childhood Education Careers IV (ECEC IV) is an applied knowledge course for students interested in learning more about becoming an early childhood teacher, nanny, or childcare provider. The course standards cover understanding the components professionalism, policies, regulation, and teaching to learn principles. Students in this course will participate in a work-based learning component of instruction and add work products to a course portfolio. Standards in this course are aligned with

Tennessee Common Core State Standards for English Language Arts & Literacy in Technical Subjects and Tennessee Psychology and Sociology standards, and the National Standards for Family and Consumer Sciences Education, Second Edition.*

Program of Study Application

This course is a capstone course in the *Childhood Development Services* program of study. For more information on the benefits and requirements of implementing this program in full, please visit the Human Services website at http://www.state.tn.us/education/cte/HumanServices.shtml.

Course Standards

Professionalism and 21st Century Skills

- 1) Add the following professional attributes to the professionalism rubric created in ECEC I and write performance indicators for each:
 - a. Attendance/punctuality
 - b. Professional dress and behavior
 - c. Positive attitude
 - d. Collaboration
 - e. Honesty
 - f. Respect
 - g. Responsibility
 - h. Appropriate technology use
 - i. Reflective teaching practice.

(TN CCSS Writing 4; FACS 14)

- 2) Interview internship supervisor to determine the child care *program philosophy*. Research and gather diverse program philosophies from a variety of care situations and write a narrative comparing and contrasting them with the internship program philosophy. (TN CCSS Reading 6, 9; TN CCSS Writing 2, 8, 9)
- 3) Analyze case studies of provider reactions to children in both positive and negative situations. Write a narrative describing the consequences of provider behaviors and comparing them to the personal code of ethics developed in ECEC I. (TN CCSS Reading 2, 6, 9; TN CCSS Writing 2, 4, 9)
- 4) Research codes of ethics for running small businesses by comparing samples from professional organizations (such as the Society for Human Resource Management). Synthesize principles from the codes to add attributes and performance indicators to the personal code of ethics created in ECEC I. This document will be included in course portfolio. (TN CCSS Reading 9; TN CCSS Writing 4, 5, 9)

Policies

5) Access electronic resources related to the Tennessee Licensure Rules for Child Care Centers to identify the provider regulations for licensure and operation. Summarize the requirements and create tracking tools for documenting legal compliance. Topics for investigation include, but are not limited to:



- a. Application for and maintenance of licensure
- b. Ownership and organizational structure
- c. Insurance
- d. Required parental communication
- e. Record keeping
- f. Adult-child ratios
- g. Indoor and outdoor play equipment
- h. Educational activities
- i. Technology use
- j. Health and safety

(TN CCSS Reading 2, 7; TN CCSS Writing 4, 6)

- 6) Research and cite the procedure for documenting and reporting child welfare concerns. Analyze a case study and assess the extent to which the proposed resolution of the case is appropriate. (TN CCSS Reading 1, 6, 8; TN CCSS Writing 9; FACS 4)
- 7) Drawing upon state regulations, develop procedures for releasing children (such as list of authorized persons; photo ID) and create parent documentation forms for medical information (such as food allergies, known disabilities, permission to administer medicine) and emergency contact information. (TN CCSS Reading 2, TN CCSS Writing 4, 6; FACS 4)

Requirements for Child Care Careers

- 8) Gather relevant information from multiple print and digital resources (such as job postings and promotional materials) to prepare a document or graphic comparing the entry-level qualifications for caregivers, assistant directors, and directors of child care centers. Evaluate the impact of postsecondary training and describe the benefits of participation in a professional early childhood organization, such as the National Association for the Education of Young Children (NAEYC). Revise the career pathway plan outlining academic and career achievement goals and timeline developed in ECEC I to reflect opportunities for advancement in the field. (TN CCSS Reading 2, 9; TN CCSS Writing 4, 5, 8, 9; FACS 4)
- 9) Review case studies in education to argue the need for background checks—fingerprinting, drug testing, and checking professional references—and a professional code of conduct for providers and volunteers. (TN CCSS Reading 8; TN CCSS Writing 1)
- 10) Working in teams, use resources such as those available from the U.S. Small Business Administration to identify the components of a business plan. Create a hypothetical child care center and write a description of the business, its mission statement and an analysis of the market for its services. (TN CCSS Reading 2; TN CCSS Writing 4; FACS 4)

Teaching and Learning

- 11) Use a lesson plan template (created in ECEC III) to create daily activities within themed units of instruction for implementation with children ages one to eight. Where appropriate, align the activities with NAEYC's effective developmentally appropriate teaching strategies:
 - a. Acknowledge what children do or say
 - b. Encourage persistence and effort



- c. Give specific feedback rather than general comments
- d. Model attitudes, problem-solving, and behavior toward others
- e. Demonstrate the correct way to do something
- f. Add challenges that promote cognitive development
- g. Ask questions that provoke children's thinking
- h. Give assistance (such as cues or hints)
- i. Provide information directly
- j. Give directions for children's action or behavior

(TN CCSS Writing 4, 5, 9; FACS 4, 12)

- 12) Use the rubric (created in ECEC III) for evaluating and selecting developmentally appropriate books, materials, toys, and technology resources.
- 13) Create developmentally appropriate, visually appealing instructional materials and resources, as well as electronic media (if available), to accompany lesson facilitation during the internship. (TN CCSS Writing 4, 6; FACS 4)
- 14) Develop a communication rubric with performance indicators for effective verbal, non-verbal, written, and electronic communication. Create a draft agenda for parent conferences. Use the rubric to evaluate simulated parent conferences (prior to internship). (TN CCSS Writing 4; FACS 13)
- 15) Research language acquisition and use by children from ages one to eight, using academic journals and case studies. Write a narrative to demonstrate understanding of teaching strategies that promote development of complex language skills. (TN CCSS Reading 9; TN CCSS Writing 2, 4; FACS 4, 12)
- 16) Draw evidence from informational texts to develop lesson activity adaptations for inclusion of children with fine motor, gross motor, cognitive, social/emotional, and self-help/adaptive special needs. (TN CCSS Reading 2, 9; TN CCSS Writing 4, 7, 9; FACS 4, 12)

Internship**

- 17) Apply knowledge from this and preceding ECEC courses to document the internship in the course portfolio. Demonstration of knowledge includes but is not limited to:
 - a. Performing simple activities to check developmental milestone attainment
 - b. Maintaining children's records
 - c. Using a lesson plan template to create daily activities within themed units of instruction for implementation with children ages one to eight using developmentally-appropriate teaching strategies
 - d. Using the behavior management chart (created in ECE III)
 - e. Arranging learning centers that provide for children's exploration, discovery, and development
 - f. Selecting and using multiple resources and teaching methods
 - g. Creating new instructional materials
 - h. Creating a classroom floor plan designed to provide equitable access and maximize learning for all students
 - i. Evaluating student levels to adapt lessons for differentiated instruction, as needed



- j. Establishing of a positive classroom climate
- k. Creating opportunities for positive communication with families

(TN CCSS Writing 4, 5, 6, 9)

- 18) Collaboratively, create a rubric that will be used by observers to evaluate preparation for the internship, implementation of lesson plans, and professionalism. (TN CCSS Writing 4)
- 19) During the internship, implement lesson plans developed in this course and carry out daily childcare routines, such as meals, naps, personal hygiene and exercise. Annotate lesson plans and work products to document lessons learned. (TN CCSS Writing 5)
- 20) Create and continually update a personal journal to document the internship. Draw connections between the experience and course content, thoughtfully reflecting on:
 - a. Tasks accomplished and activities implemented
 - b. Lesson effectiveness
 - c. Positive and negative aspects of the experience
 - d. Self-assessment and plans for refining instructional practice
 - e. Interactions with children, families, providers and other staff
 - f. Personal satisfaction

(TN CCSS Writing 4, 7, 10; FACS 4)

21) Upon conclusion of the internship, write a clear and coherent reflection paper containing a revised personal teaching philosophy and career growth plan based on the teaching journal. Produce a technology-enhanced class presentation showcasing highlights, challenges, and lessons learned from the internship. (TN CCSS Writing 2, 5, 6, 7; FACS 4)

The following artifacts will reside in the student's portfolio:

- o Revised professionalism rubric
- Revised statement of personal teaching philosophy
- Revised personal code of professional ethics
- Revised career and professional growth plan
- o A description of the internship setting, children, and a contract or list of interning student responsibilities
- Lesson plans, assignments, developmental assessment activities and instructional materials created
- Examples of visual material incorporated (e.g. graphics, presentation slides, videos, demonstrations) into lessons
- Description of instructional technology used, with examples if appropriate
- Daily teaching journal reflecting on tasks and activities, lesson effectiveness, positive and negative aspects of the experience, self-assessment, plans for refining instructional practice, and interactions with students, families, teachers and staff
- o Feedback from supervising teacher at site and from ECEC IV teacher based on observations
- o Sample child's work product



Standards Alignment Notes

*References to other standards include:

- TN CCSS Reading: <u>Tennessee Common Core State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects</u>; Reading Standards for Literacy in Science and Technical Subjects 6-12; Grades 11-12 Students (page 62).
 - Note: While not directly aligned to one specific standard, students that are engaging in activities outlined above should be able to also demonstrate fluency in Standards 3, 4, 5, and 10 at the conclusion of the course.
- TN CCSS Writing: <u>Tennessee Common Core State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects</u>; Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects 6-12; Grades 11-12 Students (pages 64-66).
 - Note: While not directly aligned to one specific standard, students that are engaging in activities outlined above should be able to also demonstrate fluency in Standards 1, 3, and 5 at the conclusion of the course.
- TN Psychology: Tennessee Department of Education Curriculum Standards, Secondary 9-12 Social Studies, Psychology 9-12.
- TN Sociology: Tennessee Department of Education Curriculum Standards, Secondary 9-12 Social Studies, Sociology 9-12.
- 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>
 - 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.



^{**}Internships should follow policies outlined in the work-based learning guidebook, found online at http://www.state.tn.us/education/cte/wb/doc/WorkBasedLearningPoliciesApril2013.pdf.



Family Studies

Primary Career Cluster:	Human Services
Consultant:	Deborah Thompson, (615)-532-2840, Deborah.Thompson@tn.gov
Course Code(s):	TBD
Prerequisite(s):	None
Credit:	1
Grade Level:	11
Graduation Requirements:	This course satisfies one credit of three credits required for an elective focus when taken in conjunction with other Human Services courses.
Programs of Study and Sequence:	This is the third course in the <i>Social & Mental Health Services</i> program of study.
Necessary Equipment:	None
Aligned Student Organization(s):	Family, Career and Community Leaders of America (FCCLA): http://www.tennesseefccla.org/ Brandon Hudson, (615) 532-2804, Brandon.Hudson@tn.gov
Coordinating Work-Based Learning:	If a teacher has completed work-based learning training, appropriate student placement can be offered. To learn more, please visit http://tennessee.gov/education/cte/wb/ .
Available Student Industry Certifications:	American Association of Family and Consumer Sciences Pre-PAC Family Services or Family and Consumer Sciences Certificate
Dual Credit or Dual Enrollment Opportunities:	There are no current dual credit /dual enrollment opportunities for this course. If interested in developing, reach out to a local postsecondary institution to establish an articulation agreement.
Teacher Endorsement(s):	050, 051, 450
Required Teacher Certifications/Training:	None
Teacher Resources:	http://www.state.tn.us/education/cte/HumanServices.shtml

Course Description

Family Studies is an applied knowledge course that examines the diversity and evolving structure of the modern family. Course standards focus on the demographic, historical, and social changes of interpersonal relationships, as well as parenting, and the effect of stressors on the family. Artifacts will be created for inclusion in a portfolio, which will continue to build throughout the program of study. Standards in the course are aligned with Tennessee Common Core State Standards for English Language Arts & Literacy in Technical Subjects, as well as Tennessee Psychology, Scientific Research, Sociology,

and US History standards and the National Standards for Family and Consumer Sciences Education, Second Edition.*

Program of Study Application

This course is an applied knowledge course in the *Social & Mental Health Services* program of study. For more information on the benefits and requirements of implementing this program in full, please visit the Human Services website at http://www.state.tn.us/education/cte/HumanServices.shtml.

Course Standards

Definition and History of Family

- Drawing on academic research and news media, synthesize a definition of family in an informative essay. Analyze diverse family structures that are representative of today's society, citing specific textual evidence from research. (TN CCSS Reading 1; TN CCSS Writing 2, 9; TN Psychology; TN Sociology; FACS 6)
- 2) Research and summarize early records of the structures of family. Use the research to create a timeline or graphic illustrating changes in the structures of families over time. Research the historical events that contributed to changes in common family structures, including but not limited to:
 - a. The Renaissance
 - b. Slavery
 - c. Industrialization of the economy
 - d. Wars
 - e. Women's right to vote

(TN CCSS Reading 2, 9; TN CCSS Writing 8; TN US History; FACS 6)

- 3) Compare and contrast different definitions of family units found in distinct groups. Explore cultural, geographical, religious, ethical, and political differences, analyzing the reasoning and evidence each provide for the development of their definition of a family. (TN CCSS Reading 8, 9; FACS 6)
- 4) Form a hypothesis about how a specific community may have changed in response to major historical events (such as World War II). Compare and contrast census records to analyze demographic trends in the community over time and present findings in an informative essay. (TN CCSS Reading 1; TN CCSS Writing 2, 4, 6; TN US History; FACS 6)
- 5) Conduct a research project examining relevant academic journal articles and news media coverage of a specific issue or trend in family studies. Supplement research with interviews and other primary sources to provide data and evidence for the development of particular phenomenon. Research topics may include, but are not limited to:
 - a. Sandwich Generation
 - b. Failure to Launch
 - c. Grandparents raising grandchildren

(TN CCSS Reading 1, 2, 9; TN CCSS Writing 7, 10; FACS 6, 15)



Family Cycle & Relationships

- 6) Create a graphic illustration that identifies the stages of the Family Life Cycle. Identify characteristics and changes at each of the stages. Summarize in an informative narrative, describing each stage and give examples of the changes in the family structure as an individual ages and passes through each stage. (TN CCSS Reading 1, 7, 9; TN CCSS Writing 2, 8, 9; FACS 6, 15)
- 7) Identify intrapersonal and interpersonal conditions, personal characteristics, attitudes and behaviors necessary for effective human relationships, exploring concepts such as understanding of self, relationship building skills, conflict management and intimacy, citing textual evidence from social science academic research. (TN CCSS Reading 1, 5; FACS 13)
- 8) Explore concepts of long-term relationships, such as love, mate selection, attachment, loneliness, conflict, and relationship dissolution, using social science academic research. Summarize relevant resources on the purpose and responsibilities of dating. Develop a logical framework of guidelines for mate selection using compatibility surveys, identifying factors that impact selection. Examine marriage laws in the state, prepare a list of requirements to obtain a marriage certificate, and describe legal rights provided through marriage, citing specific legislation and organizational policies. (TN CCSS Reading 1, 9; TN CCSS Writing 7, 9; FACS 13)
- 9) Investigate types of crises impacting families (such as unemployment, child exceptionality, divorce, death), describing characteristics of crises situations and citing rates of frequency pulled from census information and news articles. Synthesize research on theories and strategies for helping families deal productively with crises by crafting an argumentative essay making a recommendation for a specific activity that can be used to assist families in crises situations. (TN CCSS Reading 1, 2; TN CCSS Writing 1, 7, 8, 9; FACS 13)
- 10) Synthesize research to evaluate the importance of values and goals on individuals during the lifespan. Create a list of values that are observed in an individual's family of origin and a list of values that will be important in future family units. Compare and contrast the list for similarities and differences in a class discussion. (TN CCSS Reading 1, 9; TN CCSS Writing 2, 4; FACS 6)

Parenting Responsibilities

- 11) Differentiate between parenting styles described in social science academic research. Assess the extent to which the reasoning and evidence in a specific theory supports the claim(s). Parenting styles could include, but are not limited to:
 - a. Authoritarian
 - b. Permissive
 - c. Authoritative

(TN CCSS Reading 1, 2, 8; TN CCSS Writing 2, 9; FACS 6, 15)

12) Identify ways to promote and foster a child's positive self-concept. Research case studies to identify positive guidance techniques, linking each to a specific reason for child misbehavior (such as desire for attention, embarrassment, lack of expectations, etc.). (TN CCSS Reading 1, 7, 9; FACS 6, 15)



13) Investigate the adoption process nationally and globally using advanced searches of both print and digital sources. Collaboratively, develop a list that compares and contrasts the costs and benefits of each adoption process. Identify local and global agencies that are available for assistance during the adoption process. (TN CCSS Reading 2, 7, 9; TN CCSS Writing 8, 9; FACS 15)

Family Stress, Crisis, and Resilience

- 14) Research and summarize trends in family life since the integration of dual income households in America. Discuss the impact of these trends on traditional gender roles and responsibilities of family members. (TN CCSS Reading 1, 2, 9; FACS 6)
- 15) Research the impact of poverty and social inequality on the structure of the American family. Develop a list of factors that contribute to income inequality and develop strategies that promote social mobility. (TN CCSS Reading 1, 2, 9; TN CCSS Writing 2, 8, 9; FACS 6)
- 16) Research each of the stages of the Cycle of Violence. Create a graphic illustration that identifies each of the stages, with short descriptions and prevention strategies for each stage to combat the recurrence of violence. (TN CCSS Reading 1, 2, 9; TN CCSS Writing 2, 8, 9; FACS 6)
- 17) In a group, work to identify domestic abuse resources within a community. Make an informational resource for distribution in the community that could be used by the proper authorities in instances of domestic abuse. (TN CCSS Reading 1, 2, 9; TN CCSS Writing 2, 8, 9; FACS 6)

The following artifacts will reside in the student's portfolio:

- Definition of a Family Essay
- o Graphic of Family throughout History
- o Family Demographic artifacts
- o Family Trend Research Paper
- o Family Cycle graphic
- o Dating guidelines
- o Family Crisis Research artifacts
- o Family Values assessment
- o Parenting narrative
- Research on Parenting
- o Family Violence Cycle illustration
- o Domestic Abuse resources

Standards Alignment Notes

*References to other standards include:

- TN CCSS Reading: <u>Tennessee Common Core State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects</u>; Reading Standards for Literacy in Science and Technical Subjects 6-12; Grades 11-12 Students (page 62).
 - Note: While not directly aligned to one specific standard, students that are engaging in activities outlined above should be able to also demonstrate fluency in Standards 3, 4, 5, and 10 at the conclusion of the course.



- TN CCSS Writing: <u>Tennessee Common Core State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects</u>; Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects 6-12; Grades 11-12 Students (pages 64-66).
 - Note: While not directly aligned to one specific standard, students that are engaging in activities outlined above should be able to also demonstrate fluency in Standards 3 and 5 at the conclusion of the course.
- TN Psychology: Tennessee Social Studies: <u>Psychology 9-12</u> standards may provide additional insight and activities for educators.
- TN Sociology: Tennessee Social Studies: <u>Sociology 9-12</u> standards may provide additional insight and activities for educators.
- TN U.S. History: Tennessee Social Studies: <u>U.S. History 9-12</u> standards may provide additional insight and activities for educators.
- 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>
 - 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.





Foundations of Social and Mental Health

Primary Career Cluster:	Human Services
Consultant:	Deborah Thompson, (615)-532-2840, Deborah.Thompson@tn.gov
Course Code(s):	TBD
Prerequisite(s):	None
Credit:	1
Grade Level:	9
Graduation Requirements:	This course satisfies one credit of three credits required for an elective focus when taken in conjunction with other Human Services courses.
Programs of Study and Sequence:	This is the first course in both the <i>Dietetics & Nutrition Science</i> and <i>Social & Mental Health Services</i> program of study.
Necessary Equipment:	None
Aligned Student Organization(s):	Family, Career and Community Leaders of America (FCCLA): http://www.tennesseefccla.org/ Brandon Hudson, (615) 532-2804, Brandon.Hudson@tn.gov
Coordinating Work-Based Learning:	If a teacher has completed work-based learning training, appropriate student placement can be offered. To learn more, please visit http://tennessee.gov/education/cte/wb/ .
Available Student Industry Certifications:	None
Dual Credit or Dual Enrollment Opportunities:	There are no dual credit or dual enrollment opportunities for this course.
Teacher Endorsement(s):	050, 051, 450
Required Teacher Certifications/Training:	None
Teacher Resources:	http://www.state.tn.us/education/cte/HumanServices.shtml

Course Description

Introduction to Social and Mental Health is a foundational for students interested in becoming a public advocate, social worker, dietician, nutritionist, counselor, stay-at-home parent or community volunteer. This course covers the history of counseling, career investigation, stress management, mental illness, communication, and the counseling process. Artifacts will be created for inclusion in a portfolio, which will continue to build throughout the program of study. Standards in the course are aligned with Tennessee Common Core State Standards for English Language & Literacy in Technical Subjects, as well

as the Tennessee Psychology and Sociology standards, and the National Standards for Family and Consumer Sciences Education, Second Edition.*

Program of Study Application

This course is the introductory course in each of the following Human Services programs of study. For more information on the benefits and requirements of implementing these programs in full, please visit the Human Services website at http://www.state.tn.us/education/cte/HumanServices.shtml.

- Dietetics & Nutrition Science
- Social and Mental Health

Course Standards

Overview and History of Counseling and Social Services

- 1) Describe the different levels of human growth and psychological developmental (using research such as Maslow's hierarchy of needs) and articulate physiological, safety, and psychological needs of individuals. Evaluate factors that impact individual growth and development in areas related to self-understanding, personal decision making, communication, and interpersonal relationships. (TN CCSS Reading 2, 5; FACS 12)
- 2) Analyze necessary physiological and safety needs of individuals (such as adequate nutrition and exercise, safe housing, and health and sanitation practices), citing specific textual evidence from U.S. Food and Drug Administration and U.S. Department of Health and Human Services. Apply concepts learned to produce specific recommendations for physical health, including dietary guidelines and meal plans, home environment safety, and personal health and wellness. (TN CCSS Reading 1, 2; Writing 2, 7, 9; FACS 14)
- 3) Using research and case studies from medical and scholarly journals, determine connections between physical health and mental health of individuals. Synthesize research to make a claim about the impact of physical ailment or deficiency on mental health, developing claim(s) and counterclaim(s) using reasoning and evidence from research. (TN CCSS Writing 1, 9; FACS 12)
- 4) Research and summarize the influence of significant contributors to the history and development of counseling and social services. Create a timeline that shows when each of these major figures lived and worked. Major figures include, but are not limited to:
 - a. Anna Y. Reed and Eli Weaver
 - b. Dorothea Dix
 - c. Clifford Beers
 - d. William Healy, M. D.
 - e. David Spence Hill
 - f. James Cattell
 - g. Alfred Binet and Theodore Simon



h. E. G. Williamson

(TN CCSS Reading 2, 7; TN CCSS Writing 2, 6)

Career Investigation

- 5) Compile and analyze real-time labor market data, including economic and demographic trends, and compare with authentic vacancy announcements on local and national job boards. Use this information to compare and contrast occupations by education requirements, job availability, salaries, and benefits. Outline an educational pathway to obtain the necessary level of education for a chosen occupation. (TN CCSS Reading 2, 8, 9)
- 6) Examine licensing, certification, and credentialing requirements for specific counseling careers at the national, state, and local levels to maintain compliance with industry requirements. List the requirements to obtain the credentials and what one must do to maintain the credential. (TN CCSS Reading 9; TN CCSS Writing 2; FACS 7)
- 7) Examine requirements for career advancement to plan for continuing education and training. Research professional development opportunities needed to keep current on relevant trends and information within the cluster. Example careers include social worker, marriage and family therapists, health educators, and mental health counselors. (TN CCSS Reading 2, 7; TN CCSS Writing 2, 6; TN Psychology; FACS 7)

Mental Health

- 8) Research theories of mental health and create a graphic illustration or presentation summarizing the findings. Illustrations and presentations should include: key people in the development of the theory, main points of the theory, assessment of the extent to which reasoning and evidence support the theory, and implications for modern counseling practices. Theories to research include, but are not limited to:
 - a. Developmental Theory
 - b. Behavioral Theory
 - c. Cognitive-Behavioral Theory
 - d. Client-Centered Theory

(TN CCSS Reading 8; TN CCSS Writing 2, 6; TN Psychology; FACS 7, 12)

- 9) Research and create a glossary of common mental health disorders, including but not limited to the following:
 - a. Anxiety disorders: panic disorder, phobic disorders, obsessive-compulsive disorders
 - b. Schizophrenia
 - c. Affective disorders: bipolar disorder, major depression
 - d. Personality disorders: abusive personality, paranoid personality, antisocial personality
 - e. Substance abuse
 - f. Eating disorders: anorexia nervosa, bulimia

(TN CCSS Reading 1, 4; TN CCSS Writing 6; TN Psychology; FACS 7, 12)



- 10) Write a research paper or conduct a project on a current mental health issue using appropriate digital search resources and academic writing. Topics might include but are not limited to:
 - a. PTSD
 - b. Suicide
 - c. Substance abuse
 - d. Bullying
 - e. Eating disorders

(TN CCSS Reading 1; TN CCSS Writing 2, 8, 9; TN Psychology)

The Counseling Process

- 11) Summarize research to accurately describe the commonly accepted steps of the counseling process. Identify research-based practices that have been found to be successful during each step of the process and describe the evidence and reasoning supporting them.
 - a. Relationship building
 - b. Assessment and diagnosis
 - c. Formulation of counseling goals
 - d. Intervention and problem solving
 - e. Termination and follow-up
 - f. Research and evaluation

(TN CCSS Reading 2, 8; TN CCSS Writing 4, 7, 9)

Client Rights and Legal and Ethical Practices

- 12) Compare and contrast example client/patient bills of rights that address individuals receiving counseling and treatment for mental health issues from government agencies, professional organizations, and advocacy groups. Describe important areas of commonality and identify areas that may be tailored to a specific group. (TN CCSS Reading 2, 9; TN CCSS Writing 7, 9; TN Psychology)
- 13) Differentiate between legal and ethical requirements and responsibilities of counselors and social workers, citing specific textual evidence from legislation and publications by advocacy groups. Research the differences between criminal and civil laws, and intentional and unintentional torts. Give examples of each in one or more of the careers identified in research. (TN CCSS Reading 2, 9; TN CCSS Writing 7, 8, 9; TN Psychology)

Communication Skills

- 14) Develop and practice active listening skills including: identification of speaker's major points, focusing on speaker's message rather than listener's response, discriminating between fact and opinion, and verifying interpretation of message. Use appropriate note taking techniques and overcome communication barriers by treating the speaker with courtesy and respect. Seek clarity of reception of communication by responding to verbal messages and other cues such as body language by rephrasing statements and asking questions. (TN CCSS Reading 3; TN Sociology; FACS 13)
- 15) Compare and contrast communication skills for communicating with a client and daily 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. (TN CCSS Reading 4, 9; TN CCSS Writing 7; TN Sociology)
- 16) Practice communication skills by participating in role-play exercises and critiquing the role-play exercises of others. Demonstrate specific techniques for building rapport with the client or others. (TN CCSS Reading 3)

Personal and Client Safety

- 17) Recognize the signs of child abuse, elder abuse, and domestic abuse, and research the legal requirements for reporting suspected abuse. Prepare an informative text or presentation describing types of abuse, including signs and symptoms to look for, and outline the reporting requirements and procedures. (TN CCSS Writing 4, 7, 9; FACS 12)
- 18) Investigate the incidence of work-related violence within the counseling services field using case studies and news articles. Describe the most common types of violence and outline recommended precautions to prevent or control them. (TN CCSS Reading 7; TN CCSS Writing 7, 9; FACS 12)

The following artifacts will reside in the student's portfolio:

- History of Counseling artifact
- Career Fact artifact
- o Occupation graphic
- Summary of Theories of Mental Health artifact
- o Glossary of Mental Health Disorders
- o Topic Research Paper
- Counseling Process artifact
- Graphic of Patient Rights
- Techniques of Communication Skills
- Client Safety artifact
- Prevention graphic

Standards Alignment Notes

*References to other standards include:

- TN CCSS Reading: <u>Tennessee Common Core State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects</u>; Reading Standards for Literacy in Science and Technical Subjects 6-12; Grades 9-10 Students (page 62).
 - Note: While not directly aligned to one specific standard, students that are engaging in activities outlined above should be able to also demonstrate fluency in Standard 3, 5, and 6 at the conclusion of the course.
- TN CCSS Writing: <u>Tennessee Common Core State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects</u>; Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects 6-12; Grades 9-10 Students (pages 64-66).
 - Note: While not directly aligned to one specific standard, students that are engaging in activities outlined above should be able to also demonstrate fluency in Standards 3, 5 and 10 at the conclusion of the course.



- TN Psychology: Tennessee Social Studies: <u>Psychology 9-12</u> standards may provide additional insight and activities for educators.
- TN Sociology: Tennessee Social Studies: <u>Sociology 9-12</u> standards may provide additional insight and activities for educators.
- 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 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.





Human Services Practicum

Primary Career Cluster:	Human Services
Consultant:	Deborah Thompson, (615)-532-2840, Deborah.Thompson@tn.gov
Course Code(s):	TBD
Prerequisite(s):	Family Studies or Nutrition Science and Diet Therapy
Credit:	1
Grade Level:	12
Graduation Requirements:	This course satisfies one credit of three credits required for an elective focus when taken in conjunction with other Human Services courses.
Programs of Study and Sequence:	This is the fourth, and final, course in both the <i>Dietetics & Nutrition</i> Counseling and Social and Mental Health Services programs of study.
Necessary Equipment:	None
Aligned Student Organization(s):	Family, Career and Community Leaders of America (FCCLA): http://www.tennesseefccla.org/ Brandon Hudson, (615) 532-2804, Brandon.Hudson@tn.gov
Coordinating Work-Based Learning:	If a teacher has completed work-based learning training, appropriate student placement can be offered. To learn more, please visit http://tennessee.gov/education/cte/wb/ .
Available Student Industry Certifications:	American Association of Family and Consumer Sciences Pre-PAC Family Services or Nutrition
Dual Credit or Dual Enrollment Opportunities:	There are no known dual credit/dual enrollment opportunities for this course.
Teacher Endorsement(s):	050, 051, 450
Required Teacher Certifications/Training:	None
Teacher Resources:	http://www.state.tn.us/education/cte/HumanServices.shtml

Course Description

Human Services Practicum is a capstone course in the human services 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. The essential knowledge and skills of these courses include communication, critical thinking, problem solving, information technology, ethical and legal responsibilities, leadership, and teamwork. Instruction may be delivered through school-based laboratory training or through work-based learning

arrangements such as cooperative education, mentoring, and job shadowing. Standards in this course are aligned with Tennessee Common Core State Standards for English Language Arts & Literacy in Technical Subjects as well as Tennessee state standards for Psychology and Sociology.

Program of Study Application

This course is a capstone course in the following Human Services programs of study. For more information on the benefits and requirements of implementing these programs in full, please visit the Human Services website at http://www.state.tn.us/education/cte/HumanServices.shtml.

- Dietetics & Nutrition Science
- Social and Mental Health Services

Course Standards

Professionalism, Ethics, and 21st Century Skills

- 1) 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
 - h. Appropriate technology use

(TN CCSS Writing 7)

- 2) Select and research a professional organization in a counseling area of choice. Cite specific textual evidence from the organization and news articles to summarize:
 - 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
 - h. Website, contact information

(TN CCSS Reading 2; TN CCSS Writing 2, 4, 6)

3) Collect Codes of Ethics from various counseling-related professional organizations and examine areas of commonality. Participate in a class discussion on the significance of including standards in these areas. Synthesize principles from the codes investigated to create a personal code of ethics. (TN CCSS Reading 1, 2, 6; TN CCSS Writing 4, 9; TN Psychology; TN Sociology)



Stress Management

- 4) 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. (TN CCSS Reading 2; TN CCSS Writing 2, 4, 6, 7)
- 5) 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. (TN CCSS Writing 1, 7, 8)
- 6) Interview individuals working in a human services occupation (such as counseling, social work, or consumer services) concerning stressors they encounter in their profession. Using evidence compiled from the interviews, participate in a class discussion addressing the stressors associated with counseling fields and how job stress might be reduced or dealt with.

Counseling Policies and Practices

- 7) Analyze authentic case studies of counseling situations and assess in writing the degree to which their proposed resolutions are supported by legal and ethical policies, citing specific textual evidence from codes of ethics, legislation or other appropriate materials.

 (TN CCSS Reading 1, 8; TN CCSS Writing 7, 9; TN Psychology)
- 8) 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. (TN Psychology)
- 9) Work in a team to identify local area public and private agencies, businesses, and other entities that provide counseling 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 human services in your area. Counseling services might include but are not limited to:
 - a. Family
 - b. Marriage
 - c. Nutrition/Diet
 - d. Career
 - e. Social services
 - f. Grief
 - g. Substance abuse
 - h. Financial

(TN CCSS Writing 6, 7)

The Counseling Environment

10) Synthesize relevant research to prepare a checklist by which prospective environments could be evaluated to determine suitability for a counseling practice. Draft indicators to evaluate the degree to which the environment inspires client confidence in the services provided. Include but



do not limit the checklist to location, proximity to transportation, safety, and functionality of office layout. (TN CCSS Reading 1, 7, 9; TN CCSS Writing 7)

- 11) Gathering principles of effective design from multiple sources, develop standard operating procedures for a counseling services office that include but are not limited to:
 - a. Maintaining patient confidentiality
 - b. Office safety
 - c. Emergency procedures
 - d. Workplace accident and incident reports

(TN CCSS Reading 7; TN CCSS Writing 2, 4, 6)

Practicum**

- 12) 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.
- 13) Document the practicum using a journal to draw connections between the experience and previous course content by reflecting on:
 - a. Tasks accomplished and activities implemented
 - b. Positive and negative aspects of the experience
 - c. Interactions with clients and professionals
 - d. Personal satisfaction

(TN CCSS Writing 4, 9)

14) Upon conclusion of the practicum, produce a technology-enhanced class presentation showcasing highlights, challenges, and lessons learned from the experience. (TN CCSS Writing 4, 6)

The following artifacts will reside in the student's portfolio:

- o Professionalism Rubric
- Professional Organization Brochure
- Personal Code of Ethics
- o Stress Management
- Counseling Referral Guide
- Counseling Environment Checklist
- o Practicum Checklist
- o Practicum Journal
- o Practicum Presentation

Standards Alignment Notes

*References to other standards include:

• TN CCSS Reading: <u>Tennessee Common Core State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects</u>; Reading Standards for Literacy in Science and Technical Subjects 6-12; Grades 9-10 Students (page 62).



- Note: While not directly aligned to one specific standard, students that are engaging in activities outlined above should be able to also demonstrate fluency in Standard 3, 5, and 6 at the conclusion of the course.
- TN CCSS Writing: <u>Tennessee Common Core State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects</u>; Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects 6-12; Grades 9-10 Students (pages 64-66).
 - Note: While not directly aligned to one specific standard, students that are engaging in activities outlined above should be able to also demonstrate fluency in Standards 3, 5 and 10 at the conclusion of the course.
- TN Psychology: Tennessee Social Studies: <u>Psychology 9-12</u> standards may provide additional insight and activities for educators.
- TN Sociology: Tennessee Social Studies: <u>Sociology 9-12</u> standards may provide additional insight and activities for educators.
- 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>
 - 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.



^{**}Practicum activities can be work-based learning opportunities (such as internships, cooperative education, or job-shadowing) or in-class projects. Work-based learning opportunities must follow policies outlined in the work-based learning guide found online at http://www.state.tn.us/education/cte/wb/doc/WorkBasedLearningPoliciesApril2013.pdf.



Introduction to Social Health

Primary Career Cluster:	Human Services
Consultant:	Deborah Thompson, (615)-532-2840, Deborah.Thompson@tn.gov
Course Code(s):	TBD
Prerequisite(s):	None
Credit:	1
Grade Level:	5-8
Graduation Requirements:	None
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.
Necessary Equipment:	None
Aligned Student Organization(s):	Family, Career and Community Leaders of America (FCCLA): http://www.tennesseefccla.org/ Brandon Hudson, (615) 532-2804, Brandon.Hudson@tn.gov
Coordinating Work-Based Learning:	None
Available Student Industry Certifications:	None
Dual Credit or Dual Enrollment Opportunities:	N/A
Teacher Endorsement(s):	050, 051, 450
Required Teacher Certifications/Training:	None
Teacher Resources:	http://www.state.tn.us/education/cte/HumanServices.shtml

Course Description

Introduction to Human Services and Education & Training is a foundational middle school course in the Human Services cluster. This course introduces students to principles of healthy lifestyles and relationships, communication skills, relationship development, technology uses, and career exploration. Standards in this course are aligned with Tennessee Common Core State Standards for English Language Arts & Literacy for Grades 6-8.*

Course Standards

Healthy Lifestyles

- 1) Analyze the relationship between eating, sleeping, physical activity, and wellness. Assess nutrition and fitness practices that promote personal wellbeing across the life span. (TN CCSS Reading 1, 2, 7; TN CCSS Writing 7)
- 2) Describe the body's use of nutrients and identify nutritional food sources. Cite current nutrition guidelines to classify foods and identify recommended servings. Read and evaluate food label information; compare and contrast nutrition of various snacks and fast food; and use this information to create a well-balanced menu plan for adolescents. (TN CCSS Reading 1, 9; TN CCSS Writing 2, 7)
- 3) Compare food costs and determine whether there is a correlation between nutritional value and food cost. Define *food deserts* and describe their potential negative impact on community health. (TN CCSS Reading 4)
- 4) Demonstrate safe food and equipment handling procedures while preparing healthful snacks. Create an informational artifact explaining the nutritional value of the snacks. (TN CCSS Writing 2, 3, 4)
- 5) Draw evidence from informational texts to 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. (TN CCSS Reading 1, 9; TN CCSS Writing 2, 4)

Healthy Relationships

- 6) 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. (TN CCSS Reading 1, 2, 9)
- 7) Examine methods of coping with personal and family change or crisis. Role-play positive parent-child and sibling communication. Explore conflict management, negotiation, problem-solving and anger-control strategies. Research and compile a list of resources (counseling, hotlines, support groups, etc.) for help in challenging circumstances. (TN CCSS Reading 9, TN CCSS Writing 2, 4, 7, 9)

Communication

- 8) Practice giving and receiving instructions to accomplish a complex task. Recognize the consequences of poor communication skills and describe the importance of good communication between team members.
- 9) Role-play feedback situations related to school, relationships, and family. Practice active listening and appropriate "I" statements. (TN CCSS Reading 4; TN CCSS Writing 4)



Career Exploration

- 10) Complete one or more career-choice survey instruments. Evaluate personal interests, traits, abilities, and goals to maximize future educational and career opportunities. (TN CCSS Reading 2)
- 11) Research one of the sixteen nationally recognized career cluster 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. (TN CCSS Reading 1, 2, 7)

Time Management

- 12) Create a time log and analyze the percentage of time spent each day on broad categories such as sleeping, eating, travel, school assignments, socializing, work, family, chores. Use the log to develop a plan for more effective use of time. (TN CCSS Writing 4)
- 13) Write specific, measurable, and attainable goals (such as postsecondary education, home ownership) and explore logical strategies for achieving them. (TN CCSS Writing 4)

Appropriate Technology Use

- 14) Practice responsible and safe use of technology. Create a list of best practices related to computer netiquette, privacy, security, and copyright laws. (TN CCSS Writing 4)
- 15) Use technology to access, manage, create, manipulate, and interpret information. Evaluate the content of a webpage to assess its reliability and trustworthiness. Cite sources of information correctly. Demonstrate proficiency with communication technologies to prepare publications and produce other creative works. (TN CCSS Reading 1, 6, 8; TN CCSS Writing 4, 6, 9)
- 16) Use technology to prepare and deliver a presentation. Evaluate delivery options based on topic, audience characteristics, and desired outcomes. (TN CCSS Writing 6)

Standards Alignment Notes

*References to other standards include:

- TN CCSS Reading: <u>Tennessee Common Core State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects</u>; Reading Standards for Literacy in Science and Technical Subjects 6-12; Grades 6-8 Students (page 62).
 - Note: While not directly aligned to one specific standard, students that are engaging in activities outlined above should be able to also demonstrate fluency in Standard 10 at the conclusion of the course.
- TN CCSS Writing: <u>Tennessee Common Core State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects</u>; Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects 6-12; Grades 6-8 Students (pages 64-66).



- Note: While not directly aligned to one specific standard, students that are engaging in activities outlined above should be able to also demonstrate fluency in Standards 5 and 10 at the conclusion of the course.
- 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
Consultant:	Deborah Thompson, (615)-532-2840, Deborah.Thompson@tn.gov
Course Code(s):	TBD
Prerequisite(s):	None
Credit:	1
Grade Level:	10
Graduation Requirements:	This course satisfies one credit of three credits required for an elective focus when taken in conjunction with other Human Services courses.
Programs of Study and Sequence:	This is the second course in the Social & Mental Health Services program of study.
Necessary Equipment:	None
Aligned Student Organization(s):	Family, Career and Community Leaders of America (FCCLA): http://www.tennesseefccla.org/ Brandon Hudson, (615) 532-2804, Brandon.Hudson@tn.gov
Coordinating Work-Based Learning:	If a teacher has completed work-based learning training, appropriate student placement can be offered. To learn more, please visit http://tennessee.gov/education/cte/wb/ .
Available Student Industry Certifications:	American Association of Family and Consumer Sciences Pre-PAC Family Services and Family and Consumer Sciences
Dual Credit or Dual Enrollment Opportunities:	There are no known dual credit/dual enrollment opportunities for this course. If interested in developing, reach out to a local postsecondary institution to establish an articulation agreement.
Teacher Endorsement(s):	050, 051, 450
Required Teacher Certifications/Training:	None
Teacher Resources:	http://www.state.tn.us/education/cte/HumanServices.shtml

Course Description

Lifespan Development builds basic knowledge in human growth and development. The course standards include developmental theory, principles of growth, behavior of children from conception through adolescence, adult development and aging, and death and dying. Artifacts will be created for inclusion in a portfolio, which will continue to build throughout the program of study. Standards in the course are aligned with Tennessee Common Core State Standards for English Language Arts & Literacy in Technical

Subjects, as well as Tennessee Biology I, Psychology, and Sociology standards, and National Standards for Family and Consumer Sciences Education, Second Edition.*

Program of Study Application

This course is the second course in the *Social & Mental Health Services* program of study. For more information on the benefits and requirements of implementing this program in full, please visit the Human Services website at http://www.state.tn.us/education/cte/HumanServices.shtml.

Course Standards

Foundations of Human Development

- 1) 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. Methods should include the following:
 - a. Case study method
 - b. Social survey method
 - c. Naturalistic observation method
 - d. Cross-cultural studies

(TN CCSS Reading 1, 2, 7; TN Psychology; TN Sociology; FACS 12)

- 2) Using supporting evidence from a variety of academic journals and news media, 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 theories
 - b. Behavioral theories
 - c. Humanistic theories
 - d. Cognitive theories
 - e. Ecological theory
 - f. Sociocultural Theory

(TN CCSS Reading 1, 2, 6; TN Psychology; TN Sociology; FACS 12)

- 3) Conduct a research project on a topic related to human growth and development, citing specific textual evidence from academic resources. Topics might include, but are not limited to:
 - a. Emotional development/emotional intelligence
 - b. Cross-cultural conceptions of intelligence
 - c. Self-esteem
 - d. Relationships
 - e. Nature vs. nurture
 - f. Temperament and personality

(TN CCSS Reading 1, 2, 4, 9; TN CCSS Writing 2, 7, 8, 9; TN Psychology; TN Sociology; FACS 12)

Prenatal Development

4) Outline the biological processes that occur from conception to delivery of a full-term infant, sequenced by trimester. Prepare an informational artifact for parents that describe each stage



- of growth and development. Analyzing the role of heredity and environment in infant growth and development. Create a corresponding list of common risk factors during each stage. (TN CCSS Reading 1, 2, 4; TN CCSS Writing 4, 6, 7, 8, 9; TN Psychology; TN Sociology; FACS 12)
- 5) Define the concepts of DNA, genes, genetics, heredity, and analyze the structure of relationships among the concepts. Describe the process of how traits are passed from parents to offspring. Identify the most common chromosomal and gene-linked abnormalities and the health implications associated with each. (TN CCSS Reading 1, 2, 4; TN CCSS Writing 4, 7; TN Psychology; TN Sociology; FACS 12)
- 6) Research normal and abnormal labor and delivery and create a sequenced presentation, artifact, or graphic describing what happens at each stage, citing evidence from case studies and medical literature. Investigate what medical testing that the newborn might undergo over the course of the first few days of life. Newborn testing examples include but not limited to:
 - a. Apgar score
 - b. Brazelton Neonatal Behavioral Assessment Scale
 - c. Neonatal Intensive Care Unit Network Neurobehavioral Scale (NNNS)

(TN CCSS Reading 1, 2, 7; TN CCSS Writing 2, 4, 7; TN Psychology; TN Sociology)

Infancy

- 7) Research and outline the physical, cognitive, and emotional-social development that occurs during infancy. Prepare an informational artifact for parents that describes this stage of growth and development with real life examples including but 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, normal ranges for vital signs
 - b. Cognitive: reflexes, language acquisition, sensory development, play, Piaget
 - c. Emotional-social: bonding, Erikson's psychosocial task, temperament vs. personality
 - d. Appraise activities and techniques that optimize the development of the infant (TN CCSS Reading 1, 2, 4; TN CCSS Writing 2, 7, 8, 9; TN Psychology; TN Sociology)
- 8) Create an annotated model or graphic illustrating the parts of the human brain, detailing principle functions as they relate to physical and cognitive development. Draft a companion artifact on the stages of human development in the form of a timeline from toddlerhood through early adulthood. Draw conclusions from cases studies, news articles, and academic journals about the most important influences on and relationships among brain development, reasoning capacity, and learning. Define brain plasticity and describe how it changes over the lifespan. (TN Biology 4; TN Psychology; TN Sociology; FACS 12)

Toddlerhood

- 9) Research and outline the physical, cognitive, and emotional-social development that occurs during toddlerhood. Prepare an informational artifact for parents that describes this stage of growth and development with real life examples including, but not limited to the following:
 - a. Physical: height and weight, body proportions, teeth, skeletal development, vital signs, gross and fine motor skills, sleep patterns



- Cognitive: sensory development, language acquisition/vocabulary, object permanence, recognition of body parts, understanding relationships between people and things, curiosity, concept of time, moral development, symbolic play, imagination, Piaget's preoperational thought
- c. Emotional-social: separation anxiety, independence, possessive phase, toilet training, Erikson's autonomy, self-concept, temper tantrums, regression, egocentric thinking
- d. Appraise activities and techniques that optimize the development of a toddler (TN CCSS Reading 1, 2, 4; TN CCSS Writing 2, 7, 8, 9; TN Psychology; TN Sociology)

Preschool

- 10) Research and outline the physical, cognitive, and emotional-social development that occurs in preschool. Prepare an informational artifact for parents that describes this stage of growth and development with real life including but not limited to the following:
 - a. Physical: height & weight, body proportions, teeth, musculoskeletal development, vital signs, gross and fine motor skills, sleep patterns,
 - Cognitive: sensory development, depth perception, maximum visual ability, language acquisition/vocabulary, sexual curiosity, locates body parts, understanding of relationships between people and things, curiosity, concept of time, moral development, symbolic play, imagination, Piaget's preoperational thought and centration, concept formation
 - c. Emotional-social: Erikson's initiative, jealousy, preschool socialization, friendships with other children, Freud's development of superego, cooperative play, fears
 - d. Appraise activities and techniques that optimize the development of preschool age children

(TN CCSS Reading 1, 2, 4; TN CCSS Writing 2, 7, 8, 9; TN Psychology; TN Sociology)

School Age

- 11) Research and outline the physical, cognitive, and emotional-social development that occurs in school-age children. Prepare an informational artifact for parents that describes this stage of growth and development with real life examples including but not limited to the following:
 - a. Physical: height and weight, musculoskeletal development, improvement of hand-eye coordination, permanent teeth, development of gastrointestinal and nervous systems, immune system maturation, vital signs, fine motor skills development, gender differences in motor skills, development of writing, strength acquisition and endurance, sleep and rest requirements
 - b. Cognitive: visual maturity, peripheral vision and depth perception improvement, Piaget's stage, numbering classifying of objects, increased attention span, developing problem-solving skills, improved memory, language development, academic learning
 - c. Emotional-social: types of play, personality development, peer and sibling relationships, Freud's latency period, transition from Kohlberg's preconventional level of moral thought to conventional level of moral reasoning and beginning of reciprocity
 - d. Appraise activities and techniques that optimize the development of school-age children (TN CCSS Reading 1, 2, 4; TN CCSS Writing 2, 7, 8, 9; TN Psychology; TN Sociology)



Puberty and Adolescence

- 12) Research and outline the physical, cognitive, and emotional-social development that occurs during puberty and adolescence. Prepare an informational artifact that describes this stage of growth and development with real life examples including, but not limited to the following:
 - a. Physical: rapid growth to cessation of growth, development of secondary sex characteristics, maturing of reproductive system, 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
 - c. Emotional-social: peer and romantic relationships, Erikson's search for identity, conflict with authority figures
 - d. Analyze components of a healthy and safe environment during adolescence.
 - e. Appraise activities and techniques that optimize the development of adolescences (TN CCSS Reading 1, 2, 4; TN CCSS Writing 2, 7, 8, 9; TN Psychology; TN Sociology)

Early Adulthood

- 13) Research and outline the physical, cognitive, and emotional-social development that occurs during early adulthood. Prepare an informational artifact highlighting steps for achieving optimum wellness during late adulthood, addressing at minimum the following:
 - a. Physical: cessation of growth, peaking of physical functions and characteristics
 - b. Cognitive: post conventional stage of moral development, continued development of intellectual and reasoning capacities
 - c. Emotional-social: sexual maturation, Erikson's intimacy, development of a professional and personal identity
 - d. Analyze components of a healthy and safe environment during early adulthood. (TN CCSS Reading 1, 2, 4; TN CCSS Writing 2, 7, 8, 9; TN Psychology; TN Sociology)

Middle Adulthood

- 14) Research and outline the physical, cognitive, and emotional-social development that occurs during middle adulthood. Prepare an informational artifact highlighting steps for achieving optimum wellness during late adulthood, addressing at minimum the following:
 - a. Physical: decline of physical functions and characteristics, increase in health risks due to genetic conditions or contraction of diseases
 - b. Cognitive: plateau of mental capabilities, reevaluation of life purpose and meaning
 - c. Emotional-social: Erikson's task (generativity), evaluating and redesigning career options
 - d. Analyze components of a healthy and safe environment during middle adulthood.

(TN CCSS Reading 1, 2, 4; TN CCSS Writing 2, 7, 8, 9; TN Psychology; TN Sociology)

Later Adulthood

- 15) Research and outline the physical, cognitive, and emotional-social development that occurs during later adulthood. Prepare an informative artifact that includes steps for achieving optimum wellness during late adulthood, addressing at minimum the following:
 - a. Physical: continued decline of physical functions and characteristics
 - b. Cognitive: cognitive decline, long-term versus short-term memory loss
 - c. Emotional-social: Erikson's ego integrity, changes in work and leisure



d. Analyze components of a healthy and safe environment during later adulthood. (TN CCSS Reading 1, 2, 4; TN CCSS Writing 2, 7, 8, 9; TN Psychology; TN Sociology)

Death and Dying

- 16) Below are the most commonly listed stages of the grief model. Research and create graphic or artifact that explains each stage of the model. The graphic or artifact could include but not be limited to: definition of each stage, emotional and physical actions, and ways to cope.
 - 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
 - g. Acceptance and Hope

(TN CCSS Reading 1, 2, 4; TN CCSS Writing 2, 7, 8, 9; TN Psychology; TN Sociology)

Final Project

17) Differentiate the major periods of life outlined in the course and describe major developmental changes and key tasks associated with each period. Create a timeline of a human from conception to age 100 following typical growth and development patterns outlining what is occurring at each stage. (TN CCSS Reading 1, 2, 4, 7; TN CCSS Writing 4, 7, 9; TN Psychology; TN Sociology; FACS 12)

The following artifacts will reside in the student's portfolio:

- Methodologies artifact
- o Human Growth & Development report
- o Prenatal Development artifact
- o Genetic artifact
- Human Development Stage artifacts
- Death and Dying artifacts
- o Capstone Timeline graphic

Standards Alignment Notes

*References to other standards include:

- TN CCSS Reading: <u>Tennessee Common Core State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects</u>; Reading Standards for Literacy in Science and Technical Subjects 6-12; Grades 11-12 Students (page 62).
 - Note: While not directly aligned to one specific standard, students that are engaging in activities outlined above should be able to also demonstrate fluency in Standards 3, 4, 5, 8, and 10 at the conclusion of the course.
- TN CCSS Writing: <u>Tennessee Common Core State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects</u>; Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects 6-12; Grades 11-12 Students (pages 64-66).



- Note: While not directly aligned to one specific standard, students that are engaging in activities outlined above should be able to also demonstrate fluency in Standards 3, 5, and 10 at the conclusion of the course.
- TN Biology: Tennessee Science: <u>Biology I</u> standard 4 may provide additional insight and activities for educators.
- TN Psychology: Tennessee Social Studies: <u>Psychology 9-12</u> standards may provide additional insight and activities for educators.
- TN Sociology: Tennessee Social Studies, <u>Sociology 9-12</u> standards may provide additional insight and activities for educators.
- 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 <u>Framework for 21st Century Learning</u>
 - 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
Consultant:	Deborah Thompson, (615)-532-2840, Deborah.Thompson@tn.gov
Course Code(s):	TBD
Prerequisite(s):	Introduction to Social and Mental Health (TBD)
Credit:	1
Grade Level:	10
Graduation Requirements:	This course satisfies one credit of three credits required for an elective focus when taken in conjunction with other Human Services courses.
Programs of Study and Sequence:	This is the second course in the <i>Dietetics & Nutrition Science</i> program of study.
Necessary Equipment:	Nutrition laboratory with common kitchen equipment
Aligned Student Organization(s):	Family, Career and Community Leaders of America (FCCLA): http://www.tennesseefccla.org/ Brandon Hudson, (615) 532-2804, Brandon.Hudson@tn.gov
Coordinating Work-Based Learning:	If a teacher has completed work-based learning training, appropriate student placement can be offered. To learn more, please visit http://tennessee.gov/education/cte/wb/ .
Available Student Industry Certifications:	American Association of Family and Consumer Sciences Pre-PAC Nutrition or Food Science Certificate
Dual Credit or Dual Enrollment Opportunities:	There are no known dual credit /dual enrollment opportunities for this course. If interested in developing, reach out to a local postsecondary institution to establish an articulation agreement.
Teacher Endorsement(s):	050, 051, 450
Required Teacher Certifications/Training:	None
Teacher Resources:	http://www.state.tn.us/education/cte/HumanServices.shtml

Course Description

Nutrition across the Life Span is for students interested in learning more about becoming a dietitian, nutritionist, counselor, or pursing a variety of scientific, health, or culinary arts professions. This course covers human anatomy and physiological systems, nutrition requirements, as well as social, cultural, and other impacts on food preparation and integrity. Artifacts will be created for inclusion in a portfolio, which will continue to build throughout the program of study. Standards in this course are aligned with Tennessee Common Core State Standards for English Language Arts & Literacy in Technical Subjects, as

well as Tennessee Biology I, Chemistry I, Human Anatomy & Physiology (A&P), Scientific Research, and World Geography and the National Standards for Family and Consumer Sciences Education, Second Edition.*

Program of Study Application

This course is an applied knowledge course in the *Dietetics & Nutrition Counseling* program of study. For more information on the benefits and requirements of implementing this program in full, please visit the Human Services website at http://www.state.tn.us/education/cte/HumanServices.shtml.

Course Standards

Safety & Sanitation

 Compile and critique safety and sanitation procedures related to handling, preparing, storing, and serving food from industry-approved technical manuals and government published fact sheets. Identify and review general common laboratory safety procedures including but not limited to prevention and control procedures. Incorporate safety procedures and complete safety test with 100 percent accuracy. (TN CCSS Reading 3; FACS 9)

Nutrition and Health Overview

2) Synthesize research published by government agencies or academic journals on the contribution of nutrition and exercise to achieving optimum physical, mental, and social well-being at all stages of development across the life span. Create an informative essay illustrating findings on the nutritional needs of individuals and families in relation to age, gender, activity level, and health status. (TN CCSS Reading 1, 7; TN CCSS Writing 2, 4, 7, 9; FACS 14)

Anatomy and Physiology of Nutrition

- 3) Create a model or graphic illustration that identifies the major anatomic structures of the gastrointestinal (GI) system. Explain the function of each structure in the process of digestion, absorption, transport, and use of nutrients in the body. Research and develop a logical explanation of how the body deals with deficiencies and surplus nutrients, citing specific textual evidence on the impact on an individual's health. (TN CCSS Reading 1, 2; TN CCSS Writing 2, 8, 9; TN A&P 1, 5; FACS 9)
- 4) Identify, analyze, and visually represent the macro- and micro- nutrients required in the human diet. Include the common food sources of those nutrients, their chemical properties, and function in the body, as well as the influence upon biological systems in reference to maintenance and growth. (TN CCSS Reading 1, 7; TN CCSS Writing 4; TN Biology 1; FACS 9, 14)
 - a. Macro nutrients include: carbohydrates, lipids, and proteins
 - b. Micro nutrients include: minerals, vitamins, and water

Nutritional Requirements Across the Lifespan

5) Accurately read, interpret, and communicate understanding of guidance from the U.S. Food and Drug Administration (FDA), and other regulators, such as nutrition labels and daily value



recommendations using accurate symbols, key terms, and other domain-specific words and phrases. (TN CCSS Reading 4; FACS 9, 14)

- 6) 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. Life span phases should include:
 - a. Birth to 1 year
 - b. Toddlerhood
 - c. Preschool
 - d. School age
 - e. Puberty and adolescence
 - f. Pregnant and lactating females
 - g. Early adulthood
 - h. Middle adulthood
 - i. Late adulthood

(TN CCSS Reading 1, 7; TN CCSS Writing 4, 6, 8; FACS 14)

- 7) Analyze a variety of meal plans that meet nutritional requirements (caloric and RDA) as recommended by the U.S. Food and Drug Administration (FDA). 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. (TN CCSS Reading 1, 3, 4; TN CCSS Writing 7; FACS 9, 14)
- 8) Keep a food journal and compare an individual's diet to nutritional recommendations for their respective age, gender, activity level and health status. Write a summary of the findings and include conclusions drawn on recommendations of how the diet could be modified to make up for deficiencies and surpluses. (TN CCSS Reading 9; TN CCSS Writing 4; FACS 9, 14)
- 9) Compare and contrast alternative diet and lifestyle approaches to recommended dietary requirements for individuals of the same age and gender. Explain the reasons for the dietary differences in an informational artifact summarizing information to describe the physiological differences of the lifestyles, including, but not limited to:
 - a. Differences in physical activity (i.e. athletic training)
 - b. Differences in religious or ethical values (i.e. vegetarian, vegan, kosher)
 - c. Differences based on disease or physiological need (i.e. gluten free, elimination or rotation diets)

(TN CCSS Reading 1, 2, 8, 9; TN CCSS Writing 7, 8, 9; FACS 9)

Food Preferences and Choices

- 10) Research and summarize in an explanatory text the factors that contribute to food choices and preferences including cultural, geographical, economic, psychological, and societal influences. Describe the most likely results of preferences and external factors on nutritional intake. (TN CCSS Reading 1; TN CCSS Writing 2, 4, 7, 8, 9; TN World Geography 1; FACS 14)
 - a. Example of geographical external factor on nutritional intake: Individual 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: Individual 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.
- 11) Form a hypothesis and design and conduct an experiment to identify the role of the senses and/or food preparation techniques in food choices. Summarize experiment results into an argument making a claim about the impact of variables on food choice. Compare results to findings in news media and note when findings support or contradict previous explanations or accounts. (TN CCSS Reading 1, 3, 7, 9; TN CCSS Writing 1, 4, 7, 8, 9; TN Scientific Research 3, 4, 5; FACS 9, 14)
- 12) 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. Create a graphic illustration comparing actual nutrition provided by each diet to the recommended nutrition requirements for an individual with specific characteristics, noting similarities and differences in two diets. (TN CCSS Reading 1, 2, 6, 7, 8, 9; TN CCSS Writing 6, 7, 8; FACS 9, 14)

Nutritional Issues and Controversies

- 13) Synthesize evidence from multiple sources to analyze topics in nutrition, including but not limited to:
 - a. The use of genetically modified foods
 - b. Artificial sweeteners versus natural sugar
 - c. Organic and local food movements
 - d. Benefits and risk of different forms of dieting
 - e. Use of probiotics

Evaluate the validity and credibility of source materials and deduce the principle arguments for each, carefully weighing the author's evidence against potential biases. (TN CCSS Reading 1, 2, 6, 8; TN CCSS Writing 4, 8; FACS 14)

14) 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. Research various initiatives that have sought to fight obesity and improve nutrition across the nation. Summarize the intended result of an initiative in an explanatory essay, informational artifact, or presentation. (TN CCSS Reading 1, 2, 8; TN CCSS Writing 4, 7, 8; TN Biology 4; FACS 9, 14)

Food Preparation and Integrity

15) Investigate the food supply from 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. Compare this to the food handling, transportation, storage, processing, and preparation from point of sale to the table by creating a graphic illustration indicating where food is most susceptible to contamination, spoilage, and nutrient loss. (TN CCSS Reading 7; TN CCSS Writing 4, 9; FACS 9, 14)



- 16) 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 of food structure through chemical reactions. Communicate results of experiences, including comparing and contrasting results to findings in a report. Demonstrate relationships among concepts including, but not limited to:
 - a. Heat
 - b. Acidity level
 - c. Fermentation
 - d. Millard reactions
 - e. Chemically processed foods
 - f. Preparation techniques and product yield

(TN CCSS Reading 3, 5, TN Chemistry 3, TN Scientific Research 3, 4, 5)

The following artifacts will reside in the student's portfolio:

- Illustration of Nutrition Needs
- o Graphic or Model & Explanation of GI Tract
- Macro & Micro Nutrient artifact
- o Informational Artifact for Consumers
- Analysis of Meal Plans
- o Food Journal
- o Food Preferences artifact
- o Summarized Results from Food Prep Techniques Experiment
- Illustration of Nutrition Claims
- o Nutritional Issues Comparison
- Food Integrity illustration
- Food Lab Reports

Standards Alignment Notes

*References to other standards include:

- TN CCSS Reading: <u>Tennessee Common Core State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects</u>; Reading Standards for Literacy in Science and Technical Subjects 6-12; Grades 9-10 Students (page 62).
 - Note: While not directly aligned to one specific standard, students that are engaging in activities outlined above should be able to also demonstrate fluency in Standard 10 at the conclusion of the course.
- TN CCSS Writing: <u>Tennessee Common Core State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects</u>; Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects 6-12; Grades 9-10 Students (pages 64-66).
 - Note: While not directly aligned to one specific standard, students that are engaging in activities outlined above should be able to also demonstrate fluency in Standards 5 and 10 at the conclusion of the course.
- TN Biology I: Tennessee Department of Education Curriculum Standards, Secondary 9-12 Science, <u>Biology I</u>.
- TN Chemistry I: Tennessee Department of Education Curriculum Standards, Secondary 9-12 Science, Chemistry I.



- TN Human Anatomy and Physiology: Tennessee Department of Education Curriculum Standards, Secondary 9-12 Science, <u>Human Anatomy & Physiology</u>
- TN Scientific Research: Tennessee Department of Education Curriculum Standards, Secondary 9-12 Science, Scientific Research.
- TN World Geography: Tennessee Department of Education Curriculum Standards, Secondary 9-12 Social Studies, World Geography.
- 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 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
Consultant:	Deborah Thompson, (615)-532-2840, Deborah.Thompson@tn.gov
Course Code(s):	TBD
Prerequisite(s):	Nutrition Across the Lifespan (TBD)
Credit:	1
Grade Level:	11
Graduation Requirements:	This course satisfies one of three credits required for elective focus if taken in conjunction with other Human Services or Health Science courses.
Programs of Study and Sequence:	This is the third course in both the <i>Dietetics & Nutrition Counseling</i> and <i>Therapeutic Clinical Services</i> programs of study.
Necessary Equipment:	Nutrition laboratory, including basic kitchen equipment
Aligned Student Organization(s):	Family, Career and Community Leaders of America (FCCLA): http://www.tennesseefccla.org/ Brandon Hudson, (615) 532-2804, Brandon.Hudson@tn.gov
Coordinating Work-Based Learning:	If a teacher has completed work-based learning training, appropriate student placement can be offered. To learn more, please visit http://tennessee.gov/education/cte/wb/ .
Available Student Industry Certifications:	American Association of Family and Consumer Sciences Pre-PAC Nutrition or Food Science Certificate
Dual Credit or Dual Enrollment Opportunities:	There are no known dual credit/dual enrollment opportunities for this course. If interested in developing, reach out to a local postsecondary institution to establish an articulation agreement.
Teacher Endorsement(s):	050, 051, 450
Required Teacher Certifications/Training:	None
Teacher Resources:	http://www.state.tn.us/education/cte/HumanServices.shtml

Course Description

Nutrition and Diet Therapy is an applied knowledge course in nutrition for students interested in the role of nutrition in health and disease. The course covers the development of a nutrition care plan as part of the overall health care process. Methods for analyzing the nutritional health of a community are explored. Finally, the relationship of diet and nutrition to specific diseases will be researched including the role of diet as a contributor to disease and its role in the prevention and treatment of disease.

Artifacts will be created for inclusion in a portfolio, which will continue to build throughout the program of study. Standards in this course align to the Tennessee Common Core State Standards for English Language Arts & Literacy in Technical Subjects, Tennessee Common Core State Standards for Mathematics as well as to Tennessee state standards for Biology I, Chemistry I, Human Anatomy & Physiology (A&P), and Scientific Research and the National Standards for Family and Consumer Sciences Education, Second Edition.*

Program of Study Application

This course is an applied knowledge course in the following programs of study. For more information on the benefits and requirements of implementing these programs in full, please see the following websites:

- Dietetics & Nutrition Science: http://www.state.tn.us/education/cte/HumanServices.shtml
- Therapeutic Clinical Services: http://www.state.tn.us/education/cte/HealthScience.shtml

Course Standards

Safety & Sanitation

1) 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 general common laboratory safety procedures including but not limited to prevention and control procedures. Incorporate safety procedures and complete safety test with 100 percent accuracy. (TN CCSS Reading 3; FACS 9)

Nutrition and Health Overview

2) Gather relevant information from multiple authoritative print and digital sources related to the importance of a balanced diet in the achievement of optimum nutrition. Compare and contrast nutritional needs of a normal healthy diet with the needs of a client being treated for and/or recovering from illness. Prepare an informative artifact to discuss the findings. (TN CCSS Reading 7; TN CCSS Writing 2, 8, 9; FACS 9, 14)

The Nutrients and Their Metabolism

- 3) Create a model and/or graphic illustrating the major metabolic pathways that are used to produce energy for the body. Write a narrative report explaining 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:
 - a. Glycolysis
 - b. Kreb's cycle
 - c. Electron Transport
 - d. Fermentation

(TN CCSS Reading 1; TN CCSS Writing 7; TN Biology II 3; FACS 9, 14)



- 4) Synthesize information on energy balance. Apply available tools and equations to calculate Estimated Energy Requirements (EER) for an individual. 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)
 - e. Metabolic Equivalents (METs)

(TN CCSS Reading 1, 3, 7; TN CCSS Writing 2, 7; TN CCSS Math N-Q; TN Biology Embedded Math, TN A&P 5; TN Scientific Research 4; FACS 9)

Nutrition Diagnosis and Intervention

5) Prepare a presentation or informative essay that explains the Nutrition Care Process to clients and/or their families and the role it plays in the total health care of a client. Outline what occurs in each of the four phases of the process: nutrition assessment, nutrition diagnosis, nutrition intervention, and nutrition monitoring and evaluation. Include a list of frequently asked questions and their answers. (TN CCSS Reading 1, 2; TN CCSS Writing 6; TN A&P 1, 5; FACS 9)

Clinical Nutritional Assessments

- 6) 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 health care professional.
 - a. Historical information
 - b. Anthropometric data
 - c. Physical examination
 - d. Laboratory tests

(TN CCSS Reading 1, 2; TN CCSS Writing 7, 8, 9; TN A&P Embedded Inquiry; FACS 9)

Diet Analysis

7) 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. Graph the results compared to the recommended intake of each nutrient. Write an explanation on why the data collected and analyzed would or would not be sufficient to make dietary changes. (TN CCSS Reading 2; TN CCSS Writing 6; FACS 9)

Food and Nutrient Delivery

8) Compare and contrast the ways food/nutrients can be delivered to the body of someone who is ill. Describe when each is indicated. Highlight the benefits and drawbacks of each method. Prepare an informational artifact that will help family members of a client requiring parenteral or enteral nutrition understand the procedures and why they may be needed. Prepare food for enteral feeding. (TN CCSS Reading 1, 2; TN CCSS Writing 7, 8, 9; TN A&P 1, 5; FACS 9)



Behavioral-Environmental Assessments: The Individual Community

- 9) Review the tools for assessing community nutritional environment. Select one tool that identifies existing problems in the local community. Prepare a public serve announcement in the form of an editorial, a brochure, an online advertisement, or other artifact with the purpose of informing community members about the problem(s). (TN CCSS Reading 1, 3, 7, 9; TN CCSS Writing 2, 4, 7; FACS 9)
- 10) 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. (TN CCSS Reading 1, 2, 8; TN CCSS Writing 4, 7, 8; TN World Geography; FACS 9, 14)

The Relationship of Nutrition to Specific Diseases

Disorders Related to the Digestive System

- 11) Summarize the following common digestive problems, their symptoms, common causes, and prevention and treatment. Explain how they 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
 - g. Ulcers

(TN CCSS Reading 1, 2; TN CCSS Writing 2, 4, 7, 8, 9; TN A&P 5; FACS 9)

Food Intolerance and Allergies

- 12) Differentiate between food allergies and food intolerances, and describe the body's reaction to each. Research the eight most common food allergens. Describe treatment for an allergic reaction. Cite specific textual evidence in the application of knowledge, including:
 - 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 when avoiding food allergens and/or foods to which they have 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.

(TN CCSS Reading 1, 2, 4, 7, 8, 9; TN CCSS Writing 1, 2, 4, 6, 7, 8; TN A&P 4, 5; FACS 9)

Eating Disorders

- 13) Differentiate between the major eating disorders (anorexia, bulimia, binge eating) and other forms of disordered eating to create a research project specifically addressing the following:
 - 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 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 risk or aid in the therapy for the disease/condition.
- e. Prepare a menu item that meets the nutritional recommendations for those with eating disorders.

(TN CCSS Reading 1, 2, 4, 7, 8, 9; TN CCSS Writing 1, 2, 4, 6, 7, 8; TN A&P 4, 5; FACS 9)

Nutrition and Obesity

- 14) Investigate obesity using academic research and news articles and cite specific textual evidence in order to:
 - a. Describe the need for prevention of obesity to begin at an early age.
 - b. Analyze the relationship between fat cell development and metabolism and the role of set-point theory in maintaining weight losses or gains.
 - c. Differentiate between causes of obesity including genetics and environmental factors.
 - d. List health problems associated with obesity, including the dangers of fad diets, weight loss products, and other gimmicks.
 - e. Justify the use of a research-based weight-loss strategy that ensures adequate nutrition.
 - f. Make a claim about the need for extreme measures (such as surgery) for extreme cases, supporting claim(s) with reasoning and evidence from research.
 - g. Compare and contrast the impacts of lifestyle changes to increase physical activity, address stress, and change environmental factors on an individual's weight.
 - h. Make recommendations on activities necessary for the maintenance of weight loss.

(TN CCSS Reading 1, 2, 4, 7, 8, 9; TN CCSS Writing 4, 6, 7, 8; FACS 9)

Nutrition and Diabetes

- 15) Research the impact of nutrition on diabetes, differentiating between Type I and Type II. Cite specific textual evidence from academic research, medical literature and news articles in order to:
 - 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 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 risk or aid in the therapy for the disease/condition.
 - e. Prepare a menu item that meets the nutritional recommendations for diabetics.

(TN CCSS Reading 1, 2, 4, 7, 8, 9; TN CCSS Writing 4, 6, 7, 8; TN A&P 1, 3; FACS 9)



Nutrition and Cardiovascular Disease

- 16) Assess the impact of nutrition on cardiovascular health focusing on hypertension (high blood pressure), stroke, and coronary artery disease. Cite specific textual evidence from academic research, medical literature and news articles in order to:
 - 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 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 risk or aid in the therapy for the disease/condition.
 - a. Prepare a menu item that meets the nutritional recommendations for achieving good cardiovascular health.

(TN CCSS Reading 1, 2, 4, 7, 8, 9; TN CCSS Writing 4, 6, 7, 8; TN A&P 4; FACS 9)

Nutrition and Cancer

- 17) Assess the impact of nutrition on cancer focusing on the body sites affected. Cite specific textual evidence from academic research, medical literature and news articles in order to:
 - a. Describe the disease/condition, including symptoms and organ(s) affected.
 - a. Justify the role of nutrition as a contributor to the disease/condition and highlight specific dietary recommendations for minimizing those contributions.
 - b. 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 antipromoters from the diet and those that should be included in the diet.
 - c. Make recommendations for other lifestyle changes that will reduce the risk or aid in the therapy for the disease/condition.
 - d. Prepare a menu item that meets the recommendations for reducing the nutritional risks for developing cancer.

(TN CCSS Reading 1, 2, 4, 7, 8, 9; TN CCSS Writing 1, 2, 4, 6, 7, 8; TN A&P 1, 4, 5; TN Biology I 1; FACS 9)

Nutrition and Osteoporosis

- 18) Assess the impact of nutrition on bone development and maintenance focusing on osteoporosis. Cite specific textual evidence from academic research, medical literature and news articles in order to:
 - 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 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 risk or aid in the therapy for the disease/condition.



a. Prepare a menu item that meets the nutritional recommendations for maintaining good bone health.

(TN CCSS Reading 1, 2, 4, 7, 8, 9; TN CCSS Writing 1, 2, 4, 6, 7, 8; TN A&P 1, 2; FACS 9)

Nutrition and Intellectual and Developmental Disabilities

- 19) Research the known and suspected role of nutrition in brain development and mental health, examining prenatal and early childhood brain/cognitive development, mental illness, and Alzheimer's and other forms of dementia. Identify the role that nutrition plays and cite specific medical research in order to:
 - a. Describe the disease/condition, including symptoms and how the brain/nervous system are 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 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 risk or aid in the therapy for the disease/condition.

(TN CCSS Reading 1, 2, 4, 7, 8, 9; TN CCSS Writing 1, 2, 4, 6, 7, 8; TN A&P 3, 6; FACS 9)

20) From class research on the relationship between nutrition and specific diseases, select a topic where the need for further research has been identified. As a class or in small groups, outline the design for an experiment to continue the research. (TN Scientific Research 1, 2, 3; FACS 9)

The following artifacts will reside in the student's portfolio:

- Nutrition and Illness
- Metabolic Pathways graphic
- o Nutrition Care Process Diagnosis
- Diet Analysis graph
- Food and Nutrient Delivery
- o Public Service Announcement
- Artifacts on Disease, Intolerance, and Condition and their relationship to Nutrition

Standards Alignment Notes

*References to other standards include:

- TN CCSS Reading: <u>Tennessee Common Core State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects</u>; Reading Standards for Literacy in Science and Technical Subjects 6-12; Grades 11-12 Students (page 62).
 - Note: While not directly aligned to one specific standard, students that are engaging in activities outlined above should be able to also demonstrate fluency in Standards 5, 6, and 10 at the conclusion of the course.
- TN CCSS Writing: <u>Tennessee Common Core State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects</u>; Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects 6-12; Grades 11-12 Students (pages 64-66).



- Note: While not directly aligned to one specific standard, students that are engaging in activities outlined above should be able to also demonstrate fluency in Standards 3, 5, and 10 at the conclusion of the course.
- TN CCSS Math: <u>Tennessee Common Core State Standards for Mathematics</u>; Math Standards for High School: Number and Quantity, Algebra, Interpreting Functions and Statistics and Probability.
- TN Chemistry I: Tennessee Science: <u>Chemistry I</u> standards may provide additional insight and activities for educators.
- TN Biology: Tennessee Science: <u>Biology I</u> standards may provide additional insight and activities for educators.
- TN A&P: Tennessee Science: <u>Human Anatomy & Physiology</u> standards may provide additional insight and activities for educators.
- TN Scientific Research: Tennessee Science: <u>Scientific Research</u> standards may provide additional insight and activities for educators.
- 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 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.

