STRANDS AND STANDARDS

HUMAN DEVELOPMENT

Course Description

Human Development introduces the developmental stages of individuals across the lifespan. Students will study biological, cognitive, and social/emotional developmental changes of the individual in the context of the family and society. It emphasizes and demonstrates the vital connections between theory, research, and application. This can be offered as a concurrent enrollment course. Student leadership and competitive events (FCCLA) may be integrated into this course.

This course will strengthen comprehension of concepts and standards outlined in Sciences, Technology, Engineering and Math (STEM) education.

CTE® Learning that works for Utah

Intended Grade Level	11-12
Units of Credit	0.5
Core Code	34.01.00.00.197
Concurrent Enrollment Core Code	34.01.00.13.197
Prerequisite	NA
Skill Certification Test Number	301
Test Weight	0.5
License Type	CTE and/or Secondary Education 6-12
Required Endorsement(s)	
Endorsement 1	FACS General Composite
Endorsement 2	NA
Endorsement 3	NA

STRAND 1

Students will participate in activities that help increase their awareness about stages of development through the lifespan, understand the major developmental theories, and the scientific method.

Standard 1

Define development, briefly describing the how, why, and who of this definition. (STEM) *Science

- Define development; focusing on three domains of its scientific study: Biological, Cognitive, Psychosocial (social/emotional).
- List and describe the basic steps of the scientific method (1. Pose a question, 2. Develop a hypothesis, 3. Test the hypothesis, 4. Draw conclusions, 5. Report findings, 6. Replicate)
- Define the nature-nurture controversy (The impact of genetics vs. environment on development)

Standard 2

Explain the lifespan perspective, which identifies the five facets of human development. (STEM) *Science

- Explain what it means to say development is multidirectional (multiple changes in every direction including sensitive and critical periods)
- Discuss the multicontextual aspects of human life (i.e. historical events, cohorts, SES, and ecological-systems approach)
- Discuss the multicultural nature of human development including the definition of culture, ethnicity, and race.
- Discuss how the multidisciplinary approach to the study of development makes clear that each person develops simultaneously in the three domains. (biological, cognitive, psychosocial)
- Explain the importance of plasticity in human development.

Standard 3

Describe the major developmental theories—psychoanalytic theory, behaviorism, cognitive theory, humanism, evolutionary theories—that will be applied throughout the lifespan to present information and to provide a framework for interpreting events and issues in human development. (STEM) *Human Development/Biology

- Compare the major focus of psychoanalytic theories and theorists.
    - Describe the conflicts that occur during Freud's psychosexual stages.
    - Describe the crises of Erikson's theory of psychosocial development.
- Discuss the major focus of behaviorists such as Watson, Pavlov, Skinner, and Bandura. Explain the basic principles of classical and operant conditioning with social learning theory as an extension of behaviorism.
- Identify the primary focus of cognitive theories.
    - Describe Piaget's stages of cognitive development and the processes that, according to Piaget, guide cognitive development.
    - Explain Vygotsky's views on social learning, focusing on the concepts of guided participation and scaffolding in promoting cognitive growth.
- Describe the major focus of humanism according to Maslow's hierarchy of needs.
- Discuss the evolutionary theory and how it explains human development.

Standard 4

Discuss the strategies developmentalists use in their research, including scientific observation, experiments, and surveys. (STEM) *Science

- Describe scientific observation as a research strategy, noting at least one advantage (or strength) and one disadvantage (or weakness)
- Describe the components of an experiment and discuss the main advantage of this research method. (Including independent/dependent variables and experimental/control groups)
- Describe surveys, noting at least one advantage and one disadvantage.
- Describe three basic research designs used by developmental psychologists; cross-sectional, longitudinal, and cross-sequential.

Standard 5

Discuss several common mistakes that can be made in interpreting research, including the mistake of confusing correlation with causation and the ethics of research with humans. (STEM) *Science

- Discuss the difference between correlation and causation.
- Discuss the difference between quantitative and qualitative research.
- Discuss the code of ethics and protection of research.

Performance Objective 1

Research happenings during your cohort, identify how these have shaped or affected your development and outlook on life.

STRAND 2

Students will begin to understand the prenatal development process from conception to birth including genetics and risk factors.

Standard 1

Describe conception and the biological mechanisms by which normal or abnormal, chromosomes and genes are transmitted to the developing zygote. (STEM) *Human Development/Biology

- Identify the building blocks of heredity (DNA, genes, chromosomes, and gametes)
- Differentiate genotype from phenotype, and discuss genetic diversity within the human genome (include allele)
- Explain how sex is determined, and discuss the polygenic and multifactorial nature of human traits (Distinguish between monozygotic and dizygotic twins)
- Describe the additive and non-additive patterns of genetic interaction, giving examples of the traits that result from each type of interaction (Include recessive genes and X-linked genes in terms of genotype and phenotype)

Standard 2

Discuss the prenatal development process through birth (germinal/zygotic, embryonic, and fetal periods). (STEM) *Human Development/Biology

- Describe the significant developments of the germinal period (include duplication/division, differentiation, and implantation)
- Describe the embryonic period (embryo)
- Describe the fetal period (include fetus, ultrasound, age of viability)
- Describe the birth process; including the possible need for medical intervention during this process i.e. cesarean section.
- Discuss the Apgar test used to assess the newborn's condition at birth.
- Discuss the importance of prenatal care, social support, and a healthy parental alliance.
- Discuss the signs and coping methods for post-partum depression.

Standard 3

Discuss abnormal genes and chromosomes, possible harm to the fetus (teratogens), prenatal testing, and low birthweight. (STEM) *Human Development/Biology

- Describe the most common chromosomal abnormalities (i.e. Down syndrome and X-linked chromosome abnormalities)
- Identify behavioral and physical teratogens, note their effects on the developing embryo or fetus, and discuss factors that determine whether teratogens will be harmful.
- Discuss how to minimize risks involved with pregnancy (i.e. critical and sensitive period, threshold effect, fetal alcohol syndrome, and age of mother)
- Identify the difference between and consequences of low birthweight, very low birthweight, and extremely low birthweight (include preterm and small for gestational age).

Standard 4

Discuss how nature and nurture interact to affect development and which birth defects can be caused by teratogens. (STEM) *Human Development/Biology

- Describe how nature and nurture interact to yield a person's phenotype (i.e. nearsightedness and alcoholism)

Performance Objective 2

Research a teratogen and explain how it can affect a developing fetus.

STRAND 3

The student will understand the typical patterns of physical and cognitive growth, and language acquisition that occur in healthy development during infancy (first two years).

Standard 1

Understand the interaction of biological and environmental forces on physical development during the first two years. (STEM) *Human Development/Biology

- Describe the infant's height and weight, including how they change during the first two years and how they compare with those of an adult.
- Identify the reflexes that a newborn exhibits (Moro, Babinski, Grasping, Rooting)
- Describe the brain development during the first two years (i.e. neurons, axons, dendrites, synapses, prefrontal cortex, transient exuberance, and pruning), possible harm to, and protection of the brain (i.e. shaken baby syndrome and self-righting)
- Describe the extent and development of an infant's sensory and perceptual abilities in terms of the senses of hearing, vision, taste, smell, and touch (i.e. binocular vision)
- Describe the basic pattern of motor-skill development and discuss variations in the timing of motor-skill acquisition (i.e. gross motor and fine motor)
- Describe how sleep patterns change through infancy and discuss the attitudes of different cultures about where infants sleep (i.e. REM and co-sleeping)
- Explore why the infant mortality rate has decreased during the twenty-first century and understand the causes and consequences of infant malnutrition and under-nutrition.
    - Discuss the importance of childhood immunizations.
    - Discuss the nutrition for the first two years (include breast milk, colostrum, malnutrition, marasmus, and kwashiorkor)

Standard 2

Explore cognitive development—the ways in which the infant learns, thinks, and adapts to his or her surroundings. (STEM) *Human Development/Biology

- Distinguish among sensation, perception, and cognition.
- Discuss the 3 main goals of the dynamic sensory motor system (social interaction, comfort, and learning)
- Identify and describe stages one through six of Piaget's theory of sensorimotor intelligence (i.e. object permanence, little scientist, and mirror neurons)

- Explain the information-processing model of cognition and discuss research findings on infant memory (i.e. reminder session/repetition)

Standard 3

Understand the most remarkable cognitive achievement of the first two years: language acquisition. (STEM) *Human Development/Biology

- Identify the universal sequence and normative benchmark of language development (i.e. child-directed speech, babbling, holophrase, naming explosion, and grammar)
- Differentiate theories of language learning and explain current views on language learning (i.e. behaviorist, social cultural, LAD, and hybrid theories)

STRAND 4

The student will explore the psychosocial development of the first two years; including self-awareness and personality, the relationships between the infant and parents, and their culture.

Standard 1

Explore emerging emotions and brain development. (STEM) *Human Development/Biology

- Describe the basic emotions expressed by infants during the first year (i.e. social smile, stress/cortisol, separation anxiety, and stranger wariness)
- Describe the main developments in the emotional life of a toddler (include self-awareness, pride, shame, embarrassment, disgust, and guilt)
- Differentiate between temperament and personality.
- Discuss the role of temperament in the child's psychosocial development (i.e. influence of genes and child-rearing methods)
- Identify how the brain supports social emotions (i.e. memory and stress)

Standard 2

Explore how social bonds lead to healthy growth and development. (STEM) *Human Development/Biology

- Discuss the importance of goodness of fit and synchrony in caregiver–infant interaction during the first year.
- Define attachment. Explain how it is measured and influenced by context and identify factors that predict secure or insecure attachment (i.e. insecure-avoidant, secure, insecure-resistant/ambivalent, disorganized)
- Discuss the concept of social referencing (i.e. difference in how the infant interacts with mother and father)

Standard 3

Explore the psychoanalytic, behaviorism, cognitive, humanism, and evolutionary theories, to understand how the infant's emotional and behavioral responses begin to form personality. (STEM) *Human Development/Biology

- Compare and contrast Freud's first two psychosexual stages to Erikson's first two psychosocial stages of infant development (anal and oral stage, trust vs. mistrust and autonomy vs. shame and doubt)
- Describe the behaviorism perspective on emotion and personality that are influenced by parents (i.e. social learning, distal and proximal parenting)
- Describe how the cognitive theory affects a person's perspective (i.e. working model)
- Describe how the humanist theory could explain the interaction between infant and caregiver.
- Describe the evolutionary theory and how it relates to survival and reproduction (i.e. allocare)
- Discuss the impact of non-maternal care on young children and identify factors that define high-quality day care (i.e. family or center day care)

STRAND 5

The student will explore the developing child between the ages of 2 and 6.

Standard 1

Describe growth rates and changes in physical development during early childhood, as well as eating habits. (STEM) *Human Development/Biology

- Describe normal physical growth during early childhood, and account for variations in height and weight.
- Describe changes in eating habits during early childhood (i.e. overweight, deficiencies, allergies, just right principle, and oral health)
- Distinguish between gross and fine motor skills and the development of each (i.e. environmental hazards)
- Discuss the risk of accidental injury among children.
- Explain what is meant by "injury control," and describe some measures that have significantly reduced accidental death rates among children (i.e. primary, secondary, and tertiary prevention)

Standard 2

Examine brain growth and development and its role in physical and cognitive development. (STEM) *Human Development/Biology

- Describe the development of the prefrontal cortex during early childhood and its role in impulse control and appropriate focus.
- Describe the development of the limbic system, along with its role in the expression and regulation of emotions (i.e. amygdala, hippocampus, and hypothalamus)
- Discuss the processes of myelination and its effect on development during this period.
- Describe how the two hemispheres communicate with regards to corpus callosum and lateralization.

Standard 3

Explain Piaget's and Vygotsky's views of cognitive development at this age focusing on what young children can do, including their emerging abilities to theorize about the world. (STEM) *Human Development/Biology

- Describe the major characteristics of Piaget's stage of preoperational thought (i.e. symbolic thought, animism, centration, egocentrism, focus on appearance, static reasoning, irreversibility, and conservation)
    - Identify a major limitation of Piaget's research
- Explain Vygotsky's views on cognitive development, the concepts of guided participation, and scaffolding in promoting cognitive growth to expand the zone of proximal development.
- Describe children's theories
    - Theory-theory supports the idea that children are active learners
    - Theory of mind is affected by context and culture

Standard 4

Describe the cognitive learning of language. (STEM) *Human Development/Biology

- Explain vocabulary explosion and comprehension of speech (i.e. fast-mapping and over regularization)
- Describe the time frame for the development of grammar during early childhood, noting limitations in the young child's language abilities.
- Discuss bilingualism at an early age.

Standard 5

Understand the variations in early childhood education programs.

- Discuss the different options of early childhood education (i.e. home, child-centered programs, Montessori, Reggio Emilia, teacher-directed programs, and Headstart)
- Identify the characteristics of a high-quality preschool intervention program.
- Discuss the costs and benefits of early education.

Performance Objective 3

Complete a conservation experiment with a preschooler and a 7-8 year old. Identify the differences you observed between the two ages.

STRAND 6

The student will explore the ways young children begin to relate to others in expanding social environments.

Standard 1

Describe young children's social understanding, beginning with emotional development and emergence of sense of self. (STEM) *Human Development/Biology

- Explain the relationship between Erik Erikson's third stage and development of self-concept (initiative vs guilt)
- Discuss development of emotional regulation.

- Identify different types of motivation (i.e. extrinsic vs. intrinsic, and effects of rewards/positive reinforcement)
- Identify different emotions within various cultures.
- Discuss psychopathology and emotional balance (i.e. externalizing and internalizing problems)

Standard 2

Discuss importance of play in psychosocial development of young children. (STEM) *Human Development/Biology

- Discuss types of play (i.e. solitary, onlooker, parallel, associative, and cooperative)
- Identify benefits of active play (i.e. rough and tumble and sociodramatic)

Standard 3

Discusses the effects of Baumrind's parenting patterns on the developing child. (STEM) *Technology/ Human Development/Biology

- Compare and contrast the classic patterns, effects, and limitations of parenting on children (i.e. authoritarian, permissive, authoritative, and neglectful/uninvolved)
- Discuss how screen time can contribute to development (i.e. violence in children and interference with family life)
- Discuss gender differences that emerge during early childhood, focus on the explanations offered by the major developmental theories (i.e. sex differences, gender differences, phallic stage, Oedipus complex, superego, Electra complex, identification, gender schema)

Standard 4

Discuss how children develop moral values, behaviors, and social bonds. (STEM) *Human Development/Biology

- Explain how and why children develop empathy or antipathy, and describe the behaviors produced by each type of emotion (antisocial and prosocial behavior).
- Differentiate types of aggression (instrumental, reactive, relational, and bullying aggression) and developmental patterns of aggression.
- Describe pros and cons of methods of discipline (i.e. corporal punishment, psychological control, time-out/social exclusion, and explanation)

Standard 5

Identify the various categories of child maltreatment; warning signs, consequences, and prevention.

- Define different types of maltreatment (i.e. child abuse and child neglect) and short-term/long-term consequences
    - Discuss differences in data on reported vs. substantiated maltreatment.
- Discuss the three levels of prevention when addressing child maltreatment (primary, secondary, and tertiary)
- Discuss foster and kinship care as intervention options.

STRAND 7

The student will explore biological and cognitive development of middle childhood.

Standard 1

Understand middle childhood is generally the healthiest period of the life span though health related problems still occur. (STEM) *Human Development/Biology

- Describe normal physical growth and development during middle childhood.
- Discuss benefits and hazards of play activity and physical exercise for 7- to 11- year-olds.
- Discuss short-term and long-term problems of asthma and obesity in middle childhood (i.e. BMI, overweight, and obesity)

Standard 2

Examine development of the brain and cognitive abilities. (STEM) *Human Development/Biology

- Identify and discuss Piaget's concrete operational thought (i.e. classification and seriation)
- Discuss Vygotsky's views regarding the influence of sociocultural context on learning.
- Discuss how information-processing theory explains cognitive advances (i.e. selective attention, sensory memory, working memory/short-term memory, long-term memory, and metacognition)
- Discuss how changes in the brain promote cognitive development (automization and reaction time)

Standard 3

Discuss variations in schooling including language learning and testing. (STEM) *Human Development/Biology

- Understand vocabulary is affected by a child's age (i.e. pragmatics, informal/formal codes)
- Describe development of language during school years and compare bilingual education programs (i.e. immersion, bilingual, and ESL)
- Describe cultural and national variations in education (i.e. gender differences, ethnic and economic gap, objective assessment, and the concept of a hidden curriculum)
- Discuss educational choices (i.e. charter schools, parochial schools, private schools, and home schooling)
- Explain how achievement and aptitude tests are used in evaluating individual differences in cognitive growth (i.e. IQ, multiple intelligences)

Standard 4

Explore developmental psychopathology perspective and its value in treating children with special needs.

- Describe symptoms and treatment of attention-deficit disorder, attention deficit/ hyperactivity disorder, and bi-polar and discuss the use and misuse of prescription drugs in treating these disorders.
- Discuss characteristics of learning disabilities and identify symptoms and possible causes of dyslexia, autistic spectrum disorders, and describe effective treatments.
- Describe techniques that have been tried in efforts to educate children with special needs (i.e. IEP, LRE, RTI)

STRAND 8

The student will understand psychosocial development in middle childhood (ages 7 to 11) and master abilities that are important in the child's culture.

Standard 1

Explore growing social competence of children, growth of social cognition, and self-understanding. (STEM) *Human Development/Biology

- Identify themes and emphases of the psychoanalytic views (Freud and Erikson) regarding psychosocial development (industry vs. inferiority and latency)
- Describe development of the self-concept and its implications for children's self-esteem (i.e. social comparison, incremental/entity orientations)
- Discuss resilience and identify the variables that influence stressors and coping methods.

Standard 2

Explore ways in which families influence children in middle childhood. (STEM)
*Biology/Science/Behavioral Sciences

- Describe relative influences of environmental factors.
- Identify essential ways in which functional families nurture children (i.e. physical necessities, learning, self-respect, friendship, harmony/stability)
- Discuss the advantages and disadvantages of different family structures on psychosocial development.
- Explain how low income and high conflict can interfere with good family functioning.

Standard 3

Explore ways peer groups influence psychosocial development. (STEM)
*Biology/Science/Behavioral Sciences

- Discuss positive and negative social interactions of peer groups.
    - Discuss bullying (include physical, verbal, relational, cyber bullying, and prevention).

Standard 4

Understand middle childhood is a time of expanding moral reasoning. (STEM) *Human Development/Biology

- Outline Kohlberg's theory of moral development (preconventional, conventional, and postconventional)

- Discuss the shift from parental influence to peers (protect your friends, loyalty, conform to peer standards)

Performance Objective 4

Relate two personal experiences in your life and identify which of Erickson's stages of development they relate to.

STRAND 9

The student will identify the biological and cognitive development for adolescents (ages 11 to 18).

Standard 1

Explain biological maturation of the adolescent. (STEM) *Human Development/Biology

- Outline biological events of puberty (i.e. primary and secondary sex characteristics) and discuss the emotional impact of hormones.
- Identify several factors that influence the onset of puberty and discuss effects of early and late maturation (menarche and spermarche)
- Describe growth spurts in both the male and the female adolescent, focusing on changes in body weight, height, and muscles.
- Discuss relationships between adolescents' poor nutrition and their body image concerns.
    - Describe eating disorders.

Standard 2

Describe cognitive advances and limitations of adolescence. (STEM) *Human Development/Biology

- Discuss relationships between the uneven neurological development of the limbic system and the prefrontal cortex, and how this relates to adolescent cognition and behavior.
- Discuss egocentristic fantasies/fables, (personal fable, invincibility fable, and imaginary audience)
- Describe evidence of formal operational thinking (hypothetical thought, deductive and inductive reasoning)
- Discuss two modes of thinking (intuitive and analytic thought)

Standard 3

Explore teaching and learning in secondary education.

- Discuss possible reasons for slumps in academic performance and other problems that often appear during the transition from elementary to secondary school.
- Discuss relationships between educational technology and teenage cognition (i.e. cyber-danger, abuse, and addiction)
- Evaluate typical secondary school's ability to meet cognitive needs.

STRAND 10

The student will identify adolescents' search for self-understanding and identity.

Standard 1

Discuss adolescent's efforts to achieve an identity and the impact of parents and peer groups on psychosocial development. (STEM) *Human Development/Biology

- Describe development of identity during adolescence (identity vs role confusion), and identify the four major identity statuses (role confusion, foreclosure, moratorium, identity achievement)
- Explore identity achievement via religious, sexual, political/ethnic, and vocational aspects.

Standard 2

Examine influences of family, friends, and society on adolescent psychosocial development. (STEM) *Human Development/Biology

- Describe parental influence on identity formation and effects of parent–adolescent conflict and other aspects of parent–teen relationships (i.e. bickering and parental monitoring)
- Explain constructive functions of peer relationships and close friendships during adolescence (i.e. peer pressure, clique, crowd, and deviancy training) and unique challenges faced by immigrants

Standard 3

Examine romantic/sexual interactions of adolescents. (STEM) *Human Development/Biology

- Discuss development of romantic relationships during adolescence, including the challenges faced by gay and lesbian adolescents.
- Discuss various influences on teen sexual behavior, (peers, parents, and schools) and describe current trends in teen sexual behavior.
- Discuss potential problems associated with early sexual activity (teen pregnancy and STIs).
- Discuss sexual abuse.
- Discuss different sources of sexual education (home, media, peers, school)

Standard 4

Describe how sadness, anger, and delinquency can influence adolescent lives. (STEM) *Biology/Science/Behavioral Sciences

- Discuss contributing factors and causes of depression (i.e. familism, clinical depression, rumination)
- Discuss gender, ethnic, and national variations in adolescent suicides and suicide attempts (i.e. suicidal ideation, parasuicide, and cluster suicide)
- Discuss causes of delinquency and approaches for prevention.

Standard 5

Discuss drug use, abuse and preventative measures. (STEM) *Biology/Science/Behavioral Sciences

- Discuss the prevalence and significance of substance abuse for development (include the use of alcohol, tobacco, and other drugs)

Performance Objective 5

Identify where you feel you are in the four major life statuses (Role confusion, Foreclosure, Moratorium and Identity achievement) List reasons that substantiate this status.

Performance Objective 6

Identify some of the challenges faced by adolescents and emerging adults (Drug or alcohol abuse, early sexual activity, bullying, etc.) Explain ways to help avoid the pitfalls of these challenges.

STRAND 11

The student will examine the overall development of emerging adults.

Standard 1

Describe physical changes in emerging adulthood.

- Describe changes in growth, strength, and overall health that occur.
- Discuss changes in the efficiency of various body functions (i.e. organ reserve, homeostasis, allostasis, and allostatic load)
- Identify age-related trends in sexual responsiveness and differing attitudes about the purpose of sex, including increased instances of STD/STIs.
- Discuss why emerging adults are more likely than people of other ages to take part in risky behaviors (i.e. risky sports, drug use, and edgework)

Standard 2

Describe how adult thinking differs from adolescent thinking. The experiences and challenges of adulthood result in a new, more practical and flexible thinking. (STEM) *Human Development/Biology

- Identify main characteristics of thinking during emerging adulthood including post-formal thought.
- Discuss effects of culture on cognition and the relationship between cognitive growth and higher education (i.e. stereotype threat and massification)
- Compare college students and institutions today with their counterparts of a decade or two ago and evaluate changing college context.

Standard 3

Examine personality development during emerging adulthood. (STEM) *Human Development/Biology

- Explain that ethnic identity and vocational identity may still be unresolved.

- Describe personality regarding rising self-esteem and serious psychological disorders (i.e. mood disorders, anxiety disorders, and schizophrenia)
- Discuss the need for intimacy in emerging adulthood, focusing on friendship, love, and marriage (i.e. intimacy vs. isolation, hooking up, choice overload, and cohabitation)

STRAND 12

The student will examine biological and cognitive development during middle adulthood (ages 25-65).

Standard 1

Describe typical patterns of biological development during middle adulthood, as well as age-related changes in the sexual-reproductive system and in brain functioning. (STEM) *Human Development/Biology

- Identify common physical signs of aging and discuss their impact (i.e. senescence: skin, hair, shape and agility, senses)
- Identify common changes that occur in the sexual-reproductive system during middle adulthood (infertility and in-vitro fertilization, menopause, and andropause).
- Discuss changes in brain functioning (slowing of reaction time).

Standard 2

Discuss the relationship of environment and personal factors to health. (STEM) *Human Development/Biology

- Describe the relationship between health and certain lifestyle factors and effects on the brain—tobacco and alcohol use, lack of exercise, and overeating (primary vs. secondary aging)
- Identify measures for increasing health during middle adulthood (include mortality, morbidity, disability, and vitality)
- Discuss differences in stress responses (problem-focused, emotion-focused, and avoidant)
- Discuss how health varies between and within SES and ethnic groups.

Standard 3

Understand differences among the various methods of testing intelligence and recognize that intellectual abilities can follow many different developmental patterns with age.

- Trace the history of the controversy regarding adult intelligence, including findings of cross-sectional and longitudinal research and how cross-sequential research compensates for shortcomings of the other methods.
- Distinguish between fluid and crystallized intelligence, and explain how each is affected by age.
- Discuss the three fundamental forms of intelligence described by Robert Sternberg (analytical, creative, and practical)

Standard 4

Discuss cognitive expertise that often comes with experience, pointing out the ways in which expert thinking differs from that of the novice. (STEM) *Engineering/Creativity & Problem Solving

- Explain the concept of selective optimization with compensation.
- Describe how cognitive processes of experts differ from those of novices (i.e. intuitive, automatic, strategic, and flexible).

STRAND 13

The student will examine psychosocial development during middle adulthood.

Standard 1

Discuss adult personality. (STEM) *Human Development/Biology

- Examine the Big Five personality traits (openness, conscientiousness, extroversion, agreeableness, neuroticism)

Standard 2

Understand ways in which friendship and family dynamics change during adulthood. (STEM) *Human Development/Biology

- Discuss importance of the social convoy in protecting adults against the effects of stress.
- Describe roles that friendship plays in adulthood.
- Describe how relationships with siblings, children, and parents change during adulthood (i.e. fictive kin)
- Describe how and why marital relationships tend to change during adulthood (i.e. intimacy, passion, commitment and time periods of marital happiness, empty nest).
- Discuss impacts of divorce and remarriage during adulthood.

Standard 3

Examine how productivity during middle age is reflected in caregiving and employment. (STEM) *Human Development/Biology

- Explain how caregiving helps meet the need for generativity (generativity vs. stagnation)
    - Discuss parenthood, foster children, step-parenting, and adoption.
- Discuss middle-aged adults as the “sandwich generation,” focusing on their caring for their elderly parents (kinkeeper)
- Describe how balances among work, family, and self often shifts during adulthood.
- Describe differences between intrinsic and extrinsic rewards associated with working; and how job change/loss influences older workers.

Performance Objective 7

Identify which of the Big 5 you most relate to in your personality and discuss how this affects your interactions with others.

STRAND 14

The student will identify biological and cognitive development during late adulthood (ages 65+), discussing the myths and reality of this final stage of the lifespan.

Standard 1

Examine biological development during late adulthood. (STEM) *Human Development/Biology

- Define ageism and elderspeak; and explain contributions of gerontology to changing views about old age.
- Describe ongoing changes in the age distribution of the American population, noting the current shape of the population (demographic shift)
- Explain the current state of the dependency ratio and distinguish among three categories (young-old, old-old, and oldest-old)
- Discuss concepts and theories of aging (i.e. wear and tear, genetic clock, cellular aging, Hayflick limit, and calorie restriction)
- Discuss selective optimization with compensation regarding sex, driving, and senses.

Standard 2

Summarize common age-related changes that occur in the brain during late adulthood. (STEM) *Human Development/Biology

- Discuss working memory and control processes.

Standard 3

Explore physical health and describe progressive stages and forms of dementia/Major Neurocognitive Disorder (NCD). (STEM) *Human Development/Biology

- Discuss primary and secondary aging in relation to diseases and adjustments necessary to maintain optimal functioning.
- Explain the concept of compression of morbidity.
- Discuss problems with identifying causes of dementia/NCD (i.e. vascular dementia, frontal lobe dementia, Parkinson's, lewy body dementia, polypharmacy)
    - Describe the two most common organic causes.
    - Explain how symptoms can sometimes be reversed or slowed through proper treatment.

Standard 4

Discuss positive cognitive changes that may occur.

- Compare Erikson's integrity vs despair and Maslow's self-actualization.
- Discuss purposes and benefits of a life review.
- Identify wisdom and how it relates to aging.
- Describe lifestyle factors that result in centenarians (include maximum life span, average life span, diet, work, family and community, exercise and relaxation).

STRAND 15

The student will examine psychosocial development during late adulthood.

Standard 1

Examine psychosocial development through various theoretical perspectives. (STEM) *Human Development/Biology

- Explain central premises of the self-theories (i.e. integrity vs. despair, compulsive hoarding, positive effect)
- Discuss concepts of stratification theories (i.e. age, disengagement theory, and activity theory, gender, and ethnicity)

Standard 2

Explore ways older adults fulfill their need for generativity. (STEM) *Human Development/Biology

- Discuss how work is viewed and describe activities chosen by retired people (i.e. volunteerism, religious involvement, continuing education, and political activism)
- Describe components of the social convoy and explain this convoy's increasing importance during late adulthood (i.e. aging in place, NORC)

Standard 3

Explore ways older adults fulfill their need for affiliation. (STEM) *Human Development/Biology

- Describe long-term partners and how they protect against problems of aging.
- Describe relationships between older adults and younger generations (i.e. filial responsibility and types of grandparents: remote, companionate, involved, and surrogate)
- Identify roles of friendship in late adulthood.

Standard 4

Address problems facing the frail elderly and their families, including caregiving and living arrangements. (STEM) *Human Development/Biology

- Identify and discuss Activities of Daily Living (ADLs): eating, bathing, toileting, dressing, and moving; and Instrumental ADLs (IADLs) (i.e. paying bills, driving a car)
- Discuss alternative care arrangements for the frail elderly, identify advantages and disadvantages of each.
- Describe risks and predictors of elder abuse.

Performance Objective 8

List choices or changes you could make in your life to help yourself age well.

STRAND 16

Explore various views on death and dying over the lifespan.

Standard 1

Identify various meanings of death in different religious and cultural contexts. (STEM) *Human Development/Biology

- Describe how death and dying has changed from 100 years ago.
- Analyze death throughout the lifespan.

- Discuss a near-death experience.

Standard 2

Understand the meaning of a "good death" and explore the controversy to prolong life or hasten death in a terminally ill person. (STEM) *Human Development/Biology

- Describe characteristics of a "good death" that are accepted by most people (at the end of a long life, peaceful, quick, in familiar surroundings, with family and friends present, without pain or discomfort)
- Identify stages of grief according to Kubler-Ross (denial, anger, bargaining, depression, and acceptance) and compare to Maslow's Hierarchy of Needs.
- Identify the purpose of hospice and palliative care (i.e. living will, health care proxy)
- Determine differences between passive euthanasia, active euthanasia, and physician-assisted suicide.

Standard 3

Understand grief. (STEM) *Human Development/Biology

- Compare normal grief to complicated grief (absent grief, disenfranchised grief, and incomplete grief)
- Differentiate between grief (emotional component), mourning (physical component), and bereavement (cognitive component).

HUMAN DEVELOPMENT VOCABULARY

Abraham Maslow	familism	old-old
absent grief	family care center	onlooker play
active euthanasia	family structures	oral stage
Activities of Daily Living	fast-mapping	organ reserve
activity theory	fetal alcohol syndrome	over regularization
ADD	fetus	overweight
addiction	fictive kin	palliative care
ADHD	filial responsibility	parallel play
adoption	fine motor skills	parasuicide
affiliation	flexible processing	Parkinson's
age of viability	fluid intelligence	parochial school
ageism	focus on appearance	passive euthanasia
aging in place	foreclosure	peer pressure
Albert Bandura	formal codes	peers
allele	formal operational	perception
allocare	foster care	permissive
allostasis	frontal lobe dementia	personal fable
amygdala	gamete	personality
anal stage	gender schema	phallic stage
analytic thought	generativity vs. stagnation	phenotype
analytical intelligence	genes	physician assisted suicide

andropause	genetic clock theory	plasticity
animism	genotype	polygenic
anorexia-nervosa	gerontology	polypharmacy
antipathy	good death	positive reinforcement
antisocial	goodness of fit	postconventional
anxiety disorder	grammar	post-formal operational
Apgar test	grief mourning	post-partum depression
associative play	gross motor skills	practical intelligence
asthma	guided participation	pragmatics
attachment	Hayflick limit	preconventional
authoritarian	Headstart	prefrontal cortex
authoritative	health care proxy	preoperational
autistic spectrum	hidden curriculum	primary aging
automatic processing	hierarchy of needs	primary prevention
automization	hippocampus	primary sex characteristic
autonomy vs. shame/doubt	hoarding	private school
avoidant/anxious (attach.)	holophrase	prosocial
axon	home school	proximal parenting
B. J. Skinner	homeostasis	pruning
babbling	hooking up	psychological control
Babinsky reflex	hormones	psychopathology
Baumrind	hospice care	psychosocial development
bereavement	human development	puberty
Big Five personality traits	hypothalamus	qualitative
bilingualism	hypothetical thought	quantitative
binocular vision	id	race
biological development	identity achievement	reaction time
bi-polar	identity vs. role confusion	reactive aggression
blended family	IEP	recessive genes
BMI	imaginary audience	Reggio Emilia
bulimia-nervosa	immersion	relational aggression
bullying aggression	immunization	REM
caregiver	impulse control	reminder session
causation	incomplete grief	remote grandparent
cellular aging	independent variable	reported maltreatment
centenarians	inductive reasoning	resilience
centration	industry vs. inferiority	Robert Sternberg
cesarean section	infant	role confusion
charter school	infertility	rooting reflex
child abuse	informal codes	rough and tumble play
child neglect	information-processing theory	RTI
child-centered program	initiative	rumination
child-directed speech	initiative vs. guilt	sandwich generation
choice overload	insecure-resistant attachment	scaffolding
chromosome	instrumental ADLs	schizophrenia
classification	instrumental aggression	scientific method
clinical depression	integrity vs. despair	secondary aging
clique	internalizing	secondary prevention

cluster suicide	intimacy vs. isolation	secondary sex characteristic
cognitive development	intrinsic	secure attachment
cohabitation	intuitive processing	selective attention
cohort	intuitive thought	selective optimization with compensation
colostrum	invincibility fable	self-actualization
companionate grandparent	in-vitro fertilization	self-awareness
complicate grief	involved grandparent	self-righting
compression of morbidity	IQ	senescence
conception	irreversibility	sensation
concrete operational	Ivan Pavlov	sensitive period
conservation	Jean Piaget	sensori-motor
control group	John Watson	sensory memory
conventional	just right principle	separation anxiety
cooperative play	kinkeeper	seriation
coping methods	kinship care	shaken baby syndrome
corporal punishment	Kohlberg	short-term memory
corpus callosum	Kubler-Ross	Sigmund Freud
correlation	kwashiorkor	social comparison
co-sleeping	LAD	social convoy
creative intelligence	language acquisition	social learning
critical period	latency	social referencing
cross-sectional	lateralization	social smile
cross-sequential	learning disability	sociodramatic play
crowd	Lev Vygotsky	solitary play
crystalized intelligence	lewy body dementia	spermarche
culture	life review	static reasoning
cyber bullying	limbic system	stereotype
cyber-danger	limbic system	STI
day care center	little scientist	stranger wariness
deductive reasoning	living will	strategic processing
dementia	longitudinal	stratification theories
demographic shift	long-term memory	stress/cortisol
dendrite	low birthweight	stressors
dependent variable	LRE	substantiated maltreatment
deviancy training	malnutrition	suicidal ideation
disability	marasmus	superego
disenfranchised grief	massification	surrogate grandparent
disengagement theory	menarche	survey
disorganized attachment	menopause	symbolic thought
distal parenting	metacognition	synapse
divorce	mirror neurons	synchrony
dizygotic twins	monozygotic twins	teacher-directed program
DNA	Montessori	temperament
dominant genes	mood disorder	teratogen
Down syndrome	moratorium	tertiary prevention
dyslexia	morbidity	theory of mind
eating disorder	moro/startle reflex	theory-theory
economic gap		

edgework	mortality	threshold effect
ego	multiple intelligences	time-out/social exclusion
egocentric fantasies	myelination	transient exuberance
egocentrism	naming explosion	trust vs. mistrust
elderspeak	nature	ultrasound
Electra complex	NCD	under-nutrition
embryo	neglectful	vascular dementia
empathy	neuron	very low birthweight
empty nest	neuroticism	vitality
Erik Erikson	normal grief	vocational identity
ESL	nuclear family	wear and tear theory
ethics	nurture	wisdom
ethnic identity	obesity	working memory
ethnicity	object permanence	working model
experimental group	objective assessment	X-linked genes
externalizing	observation	young-old
extremely low birthweight	Oedipus complex	ZPD
extrinsic	oldest-old	Zygote

Skill Certificate Test Points by Strand

Test Name	Test #	Number of Test Points by Strand															Total Points	Total Questions
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Human Development	105	6	9	8	5	5	8	4	5	5	4	4	4	3	4	2	3	79	68

FCCLA Integration into Human Development:

STAR Events: Career Investigation, Environmental Ambassador, Focus on Children, Illustrated Talk, Interpersonal Communications, Job Interview, Leadership, Life Event Planning, Advocacy, Chapter Service Project Display, Chapter Service Project Portfolio, National Programs in Action, Early Childhood Education, Teach and Train.

On-line STAR Event: Digital Stories for Change

Skill Demonstration Events: Impromptu Speaking, Toys that Teach, Technology in Teaching, Early Childhood, Science in FACS.

National Programs: Career Connection, Families First, Leadership Service in Action, Power of One, Student Body, STOP the Violence-Students Taking on Prevention.