

# FAMILY AND CONSUMER SCIENCES STANDARDS

The Iowa Family and Consumer Sciences model includes national standards, national benchmarks, national indicators, model Iowa comprehensive occupational competencies, and academic proficiencies. (Revalidated National Standards 2009)

## CAREER, COMMUNITY, AND FAMILY CONNECTIONS

**STANDARD 1: Integrate multiple life roles and responsibilities in family, work, and community settings.**

### **BENCHMARKS:**

**1.1 Analyze strategies to manage multiple roles and responsibilities (individual, family, career, community and global).**

### **INDICATORS:**

- 1.1.1 Summarize local and global policies, issues, and trends in the workplace and community that affect individuals and families.
- 1.1.2 Analyze the effects of social, economic, and technological change on work and family dynamics.
- 1.1.3 Analyze ways that individual career goals can affect the family's capacity to meet goals for all family members.
- 1.1.4 Analyze potential effects of career path decisions on balancing work and family.
- 1.1.5 Define goals for life-long learning and leisure opportunities for all family members.
- 1.1.6 Develop a life plan including pathways to acquiring the knowledge and skills needed to achieve individual, family, and career goals.

**1.2 Demonstrate transferable and employability skills in school, community and workplace settings.**

- 1.2.1 Analyze potential career choices to determine the knowledge, skills, and attitudes associated with each career.
- 1.2.2 Demonstrate job seeking and job keeping skills.
- 1.2.3 Apply communication skills in school, community and workplace settings.
- 1.2.4 Demonstrate teamwork skills in school, community and workplace settings.
- 1.2.5 Analyze strategies to manage the effects of changing technologies in workplace settings.
- 1.2.6 Demonstrate leadership skills and abilities in school, workplace and community settings.
- 1.2.7 Analyze factors that contribute to maintaining safe and healthy school, work and community environments.
- 1.2.8 Demonstrate work ethics and professionalism.

**1.3 Evaluate the reciprocal effects of individual and family participation in community activities.**

- 1.3.1 Analyze goals that support individuals and family members in carrying out community and civic responsibilities.
- 1.3.2 Demonstrate skills that individuals and families can utilize to support civic engagement in community activities.
- 1.3.3 Analyze personal and family assets and skills that provide services to the community.
- 1.3.4 Analyze community resources and systems of formal and informal support available to individuals and families.

- 1.3.5 Analyze the effects of public policies, agencies, and institutions on the family.
- 1.3.6 Identify ways individuals and families can influence change in policies, agencies, and institutions that affect individuals and families.

**MODEL IOWA COMPREHENSIVE OCCUPATIONAL COMPETENCIES (INDICATORS):**

1. Demonstrate alternative ways of effective communication.
2. Describe ways to build good interpersonal relationships.
3. Identify risks of sexual activity.
4. Identify and demonstrate appropriate response to family problems and crisis.
5. Identify forms of stereotyping and discrimination and utilize appropriate responses.
6. Develop problem-solving techniques.
7. Identify ways to deal with peer pressure.
8. Describe ways to strengthen family.
9. Identify the ways to balance work, family and individual needs.
10. Develop short and long-term planning, goal-setting and decision-making skills.
11. Analyze family living/parenthood related occupations.
12. Demonstrate community involvement and responsibility.
13. Locate and/or utilize community resources available to self and family.
14. Analyze personal needs and characteristics and their impact on family, career and community.
15. Evaluate effective conflict prevention and management techniques.
16. Demonstrate teamwork and leadership skills in the family, workplace, and community.
17. Demonstrate standards that guide behavior in interpersonal relationships.

**ACADEMIC PROFICIENCIES (NO CHILD LEFT BEHIND):**

**Language Arts**

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks
- Demonstrates competence in speaking to provide, distribute, or find information
- Adapts listening strategies to utilize verbal and nonverbal content of communication
- Demonstrates competence in making oral formal and informal presentations, including selecting and using media
- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation

**Mathematics**

- Adds, subtracts, divides, and multiplies whole and mixed numbers, fractions, and decimals
- Mentally adds, subtracts, divides and multiplies whole numbers

**CONSUMER AND FAMILY RESOURCES**

**STANDARD 2: Evaluate management practices related to the human, economic, and environmental resources.**

**BENCHMARKS:**

**2.1 Demonstrate management of individual and family resources, such as food, clothing, shelter, health care, recreation, transportation, time and human capital.**

**INDICATORS:**

- 2.1.1 Apply management and planning skills and processes to organize tasks and responsibilities.
- 2.1.2 Analyze how individuals and families make choices to satisfy needs and wants.

- 2.1.3 Analyze decisions about providing safe and nutritious food for individuals and families.
  - 2.1.4 Apply consumer skills to providing and maintaining clothing.
  - 2.1.5 Apply consumer skills to decisions about housing, utilities, and furnishings.
  - 2.1.6 Summarize information about procuring and maintaining health care to meet the needs of individuals and family members.
  - 2.1.7 Apply consumer skills to decisions about recreation.
  - 2.1.8 Apply consumer skills to acquire and maintain transportation that meets the needs of individuals and family members.
- 2.2 Analyze the relationship of the environment to family and consumer resources.**
- 2.2.1 Analyze individual and family responsibility in relation to the environmental trends and issues.
  - 2.2.2 Summarize environmental trends and issues affecting families and future generations.
  - 2.2.3 Demonstrate behaviors that conserve, reuse, and recycle resources to maintain the environment.
  - 2.2.4 Explain government regulations for conserving natural resources.
- 2.3 Analyze policies that support consumer rights and responsibilities.**
- 2.3.1 Analyze state and federal policies and laws providing consumer protection.
  - 2.3.2 Analyze how policies become laws related to consumer rights.
  - 2.3.3 Analyze skills used in seeking information related to consumer rights.
- 2.4 Evaluate the effects of technology on individual and family resources.**
- 2.4.1 Summarize types of technology that effect family and consumer decision-making.
  - 2.4.2 Analyze how media and technological advances affect family and consumer decisions.
  - 2.4.3 Assess the use of technology and its effect on quality of life.
- 2.5 Analyze relationships between the economic system and consumer actions.**
- 2.5.1 Analyze the use of resources in making choices that satisfy needs and wants of individuals and families.
  - 2.5.2 Analyze individual and family roles in the economic system.
  - 2.5.3 Analyze economic effects of laws and regulations that pertain to consumers and providers of services.
  - 2.5.4 Analyze practices that allow families to maintain economic self-sufficiency.
- 2.6 Demonstrate management of financial resources to meet the goals of individuals and families across the life span.**
- 2.6.1 Evaluate the need for personal and family financial planning.
  - 2.6.2 Apply management principles to individual and family financial practices.
  - 2.6.3 Apply management principles to decisions about insurance for individuals and families.
  - 2.6.4 Evaluate personal and legal documents related to managing individual and family finances.

**MODEL IOWA COMPREHENSIVE OCCUPATIONAL COMPETENCIES (INDICATORS):**

1. Identify resources and procedures for planning expenses, saving and managing finances.
2. Apply the principles of management in the home (i.e., prioritizing, planning, delegation, evaluation, time allocation).
3. Use the decision-making planning process to calculate expenses, savings and to manage finances.

4. Develop plans to protect and track resources.
5. Analyze economic use of resources.

**ACADEMIC PROFICIENCIES (NO CHILD LEFT BEHIND):**

**Language Arts**

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts and vocabulary
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks
- Demonstrates competence in speaking to provide, distribute, or find information
- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation
- Demonstrates competence in making oral formal and informal presentations, including selecting and using media
- Adapts listening strategies to utilize verbal and nonverbal content of communication

**Mathematics**

- Interprets charts, tables, and graphs
- Adds, subtracts, divides, and multiplies, mixed numbers, fractions, and decimals
- Uses a calculator to add, subtract, divide, and multiply whole and mixed numbers, decimals, calculate square root, percentages and ratios
- Mentally adds, subtracts, divides and multiplies whole numbers

**CONSUMER SERVICES**

**STANDARD 3: Integrate knowledge, skills, and practices required for careers in consumer services.**

**BENCHMARKS:**

**3.1 Analyze career paths within consumer service industries.**

**INDICATORS:**

- 3.1.1 Explain roles and functions of individuals engaged in consumer service careers.
- 3.1.2 Analyze opportunities for employment and entrepreneurial endeavors.
- 3.1.3 Summarize education and training requirements and opportunities for career paths in consumer services.
- 3.1.4 Analyze the effects of the consumer service industry on local, state, national, and global economies.
- 3.1.5 Create an employment portfolio for use with applying for internships and work-based learning opportunities in consumer service careers.
- 3.1.6 Analyze the role of professional organizations in consumer service careers.

**3.2 Analyze factors that impact consumer advocacy.**

- 3.2.1 Analyze the role of advocacy groups at state and national levels.
- 3.2.2 Analyze the contributions of policy makers to consumer advocacy.
- 3.2.3 Demonstrate strategies that enable consumers to become advocates.
- 3.2.4 Analyze the effects of consumer protection laws on advocacy.
- 3.2.5 Apply strategies to reduce the risk of consumer fraud.
- 3.2.6 Analyze the role of media in consumer advocacy.
- 3.2.7 Analyze the effects of manufacturers' policies and procedures on advocacy.
- 3.2.8 Analyze the use of educational and promotional materials in consumer advocacy.

**3.3 Analyze factors in developing a long-term financial management plan.**

- 3.3.1 Explain the effects of the economy on personal income, individual and family security, and consumer decisions.
- 3.3.2 Demonstrate components of a financial planning process that reflects the distinction between needs, wants, values, goals, and economic resources.
- 3.3.3 Analyze the effect of consumer credit in long-term financial planning.
- 3.3.4 Compare investment and savings alternatives.
- 3.3.5 Analyze the effects of risk management strategies on long-term financial planning.
- 3.3.6 Analyze the effect of key life transitions on financial planning.
- 3.3.7 Explain the role of estate planning in long-term financial planning.
- 3.3.8 Analyze factors that influence establishing and maintaining a good credit rating and the effect of credit ratings on rates and terms for credit and insurance.

**3.4 Analyze resource consumption for conservation and waste management practices.**

- 3.4.1 Investigate sources and types of residential and commercial energy, water policy and usage, waste disposal, and pollution issues.
- 3.4.2 Evaluate local, state, and national private and government consumer programs and services to recycle and conserve energy and environmental resources.
- 3.4.3 Explore strategies and practices to conserve energy and reduce waste.
- 3.4.4 Examine waste management issues.
- 3.4.5 Examine roles of government, industry, and family in energy consumption.

**3.5 Demonstrate skills needed for product development, testing, and presentation.**

- 3.5.1 Conduct market research to determine consumer trends and product development needs.
- 3.5.2 Design or analyze a consumer product.
- 3.5.3 Analyze features, prices, product information, styles, and performance of consumer goods for potential trade-offs among the components.
- 3.5.4 Evaluate a product utilizing valid and reliable testing procedures.
- 3.5.5 Apply statistical analysis processes to interpret, summarize, and report data from tests.
- 3.5.6 Evaluate the labeling, packaging, and support materials of consumer goods.
- 3.5.7 Demonstrate a product to educate an audience about a new product on the consumer market.
- 3.5.8 Utilize appropriate marketing and sales techniques to aid consumers in the selection of goods and services that meet consumer needs.

**MODEL IOWA COMPREHENSIVE OCCUPATIONAL COMPETENCIES (INDICATORS):**

1. Identify consumer rights and responsibilities.
2. Evaluate advertising, warranties, written contracts and quality of goods and equipment.
3. Analyze consumer education and advocacy careers.
4. Locate and/or utilize consumer education resources for assistance.
5. Assess potential purchases in relation to resources.

**ACADEMIC PROFICIENCIES (NO CHILD LEFT BEHIND):**

**Language Arts**

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks
- Demonstrates competence in speaking to provide, distribute, or find information
- Adapts listening strategies to utilize verbal and nonverbal content of communication
- Demonstrates competence in making oral formal and informal presentations, including selecting and using media

- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation

### **Mathematics**

- Interprets charts, tables, and graphs
- Solves problems and generates conclusions using deductive reasoning
- Mentally, manually, and by calculator, adds, subtracts, divides, multiplies whole and mixed numbers, fractions, decimals, calculates square root, percentages, and formulas
- Understands and applies basic and advanced methods of measurement
- Understands sampling theory, probability theory, and error of measure
- Calculates and evaluates algebraic expressions; and solves problems and generates conclusions using deductive reasoning
- Calculates and evaluates basic statistical routines
- Constructs charts, tables, and graphs

### **Science**

- Applies and uses maps, charts, tables and graphs to complete tasks
- Applies and uses scientific methods to solve problems
- Identifies operational definitions
- Uses computers for information processing

## **EARLY CHILDHOOD, EDUCATION, AND SERVICES**

### **STANDARD 4: Integrate knowledge, skills, and practices required for careers in early childhood, education, and services.**

#### **BENCHMARKS:**

#### **4.1 Analyze career paths within early childhood, education, and services.**

#### **INDICATORS:**

- 4.1.1 Explain the roles and functions of individuals engaged in early childhood, education, and services.
- 4.1.2 Analyze opportunities for employment and entrepreneurial endeavors.
- 4.1.3 Summarize education and training requirements and opportunities for career paths in early childhood, education, and services.
- 4.1.4 Analyze the impact of early childhood, education, and services occupations on local, state, national, and global economies.
- 4.1.5 Create an employment portfolio for use with applying for internships and work-based learning opportunities in education and early childhood.
- 4.1.6 Analyze the role of professional organizations in education and early childhood.

#### **4.2 Analyze developmentally appropriate practices to plan for early childhood, education, and services.**

- 4.2.1 Analyze child development theories and their implications for educational and childcare practices.
- 4.2.2 Apply a variety of assessment methods to observe and interpret children's growth and development.
- 4.2.3 Analyze cultural and environmental influences when assessing children's development.
- 4.2.4 Analyze abilities and needs of children and their effects on children's growth and development.
- 4.2.5 Analyze strategies that promote children's growth and development.

**4.3 Demonstrate integration of curriculum and instruction to meet children’s developmental needs and interests.**

- 4.3.1 Analyze a variety of curriculum and instructional models.
- 4.3.2 Implement learning activities in all curriculum areas that meet the developmental needs of children.
- 4.3.3 Implement an integrated curriculum that incorporates a child’s language, learning styles, early experiences, and cultural values.
- 4.3.4 Demonstrate a variety of teaching methods to meet individual needs of children.
- 4.3.5 Arrange learning centers that provide for children’s exploration, discovery, and development.
- 4.3.6 Establish activities, routines, and transitions.

**4.4 Demonstrate a safe and healthy learning environment for children.**

- 4.4.1 Manage physical space to maintain learning.
- 4.4.2 Apply safe and healthy practices that comply with state regulations.
- 4.4.3 Implement strategies to teach children health, safety, and sanitation habits.
- 4.4.4 Plan safe and healthy meals and snacks.
- 4.4.5 Document symptoms of child abuse and neglect and use appropriate procedures to report suspected abuse or neglect to the designated authorities.
- 4.4.6 Implement basic health practices and prevention procedures for workers and children regarding childhood illness and communicable diseases.

**4.5 Demonstrate techniques for positive collaborative relationships with children.**

- 4.5.1 Apply developmentally appropriate guidelines for behavior.
- 4.5.2 Demonstrate problem-solving skills with children.
- 4.5.3 Demonstrate interpersonal skills that promote positive and productive relationships with children.
- 4.5.4 Implement strategies for constructive and supportive interactions between children and families.
- 4.5.5 Analyze children’s developmental progress and summarize developmental issues and concerns.

**4.6 Demonstrate professional practices and standards related to working with children.**

- 4.6.1 Utilize opportunities for continuing training and education.
- 4.6.2 Apply professional ethical standards as accepted by the recognized professional organizations.
- 4.6.3 Implement federal, state, and local standards, policies, regulations, and laws that affect children, families, and programs.
- 4.6.4 Demonstrate enthusiasm, initiative, and commitment to programs goals and improvements.
- 4.6.5 Apply business management skills to planning businesses in early childhood, education, and services.

**MODEL IOWA COMPREHENSIVE OCCUPATIONAL COMPETENCIES (INDICATORS):**

1. Identify personal qualities required for childcare providers.
2. Identify basic elements (principles) of child development with emphasis on age appropriate behaviors/expectations of physical, emotional, intellectual, and social development.
3. Assess a child in the four developmental areas: physical, social, intellectual, and emotional.
4. Observe and record a child’s developmental progress.
5. Plan and implement appropriate activities to promote development in children and adolescents in the following areas: outdoor/indoor, gross/fine motor, language development, creativity, visual, auditory and tactile stimulus, cognitive, nutrition, and social development.
6. Analyze the impact of caregiver practices on a child’s self-esteem.

7. Plan, prepare, and serve nutritional snacks/meals that allow for self-feeding when appropriate.
8. Identify proper nutritional needs and use appropriate feeding procedures for infants and toddlers.
9. Demonstrate appropriate diapering and toileting procedures for infants/toddlers/children.
10. Identify the elements of a healthy and safe environment.
11. Demonstrate the appropriate and effective methods of guidance when caring for children.
12. Analyze the importance of play on the development of children.
13. Identify issues that relate to the care of school-age children.
14. Identify coping skills for children and adolescents.
15. Demonstrate the ability to maintain accurate records.
16. Develop personnel and center policies based on state guidelines.
17. Analyze the functions of a childcare facility in a community.
18. Demonstrate the ability to communicate and interact with families in an appropriate manner.
19. Identify issues involved in the daily care of children in a least restricted environment.
20. Identify factors contributing to child abuse.
21. Identify indications of child abuse.
22. Identify procedures for reporting and documenting child abuse.
23. Select and demonstrate age appropriate safety restraint techniques when transporting children.
24. Identify legal issues related to childcare to include: confidentiality, custody, corporal punishment, personal and center liability, transporting children, and medical emergencies.
25. Identify rules and regulations governing childcare.
26. Incorporate multicultural, nonsexist experiences in all aspects of childcare.
27. Analyze the diverse needs of children.
28. Identify characteristics of professionalism required for child care providers to include: responsibility to children, families, staff and center; advocacy for children; professional pride; respect of children, families, and staff; and professional growth.
29. Demonstrate the ability to locate and/or utilize child development and parenting resources.
30. Assess the impact of parenting roles and responsibilities on the well being of children and families.
31. Investigate health concerns and needs at all stages of development.
32. Identify the additional challenges of teen pregnancy and parenting.
33. Describe the process of sexual reproduction, stages of pregnancy, and the birthing process.
34. Analyze contraception and family planning methods.
35. Analyze career pathways within early childhood development, education, and services.

### **ACADEMIC PROFICIENCIES (NO CHILD LEFT BEHIND):**

#### **Language Arts**

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks
- Demonstrates competence in speaking to provide, distribute, or find information
- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation

#### **Mathematics**

- Adds, subtracts, divides, and multiplies whole and mixed numbers, fractions, and decimals

#### **Science**

- Applies and uses maps, charts, tables, and graphs to complete tasks
- Applies and uses scientific methods to solve problems
- Describes and explains organisms development and adaptation
- Uses computers for information processing

- Identifies operational definitions
- Knows the environmental impact of materials (solid, liquid, gaseous)
- Understands the effect of chemicals on humans and plants

## **FACILITIES MANAGEMENT AND MAINTENANCE**

**STANDARD 5: Integrate knowledge, skills, and practices required for careers in facilities management and maintenance.**

**BENCHMARKS:**

**5.1 Analyze career paths within the facilities management and maintenance areas.**

**INDICATORS:**

- 5.1.1 Explain the roles and functions of individuals engaged in facilities management and maintenance careers.
  - 5.1.2 Analyze opportunities for employment and entrepreneurial endeavors.
  - 5.1.3 Summarize education and training requirements and opportunities for career paths in facilities management and maintenance.
  - 5.1.4 Analyze the effects of facilities management and maintenance occupations on local, state, national, and global economies.
  - 5.1.5 Create an employment portfolio for use with applying for internships and work-based learning opportunities in facilities management and maintenance careers.
  - 5.1.6 Analyze the role of professional organizations in facilities management and maintenance professions.
- 5.2 Demonstrate planning, organizing, and maintaining an efficient housekeeping operation for residential or commercial facilities.**
- 5.2.1 Apply housekeeping standards and procedures.
  - 5.2.2 Operate cleaning equipment and tools.
  - 5.2.3 Manage use of supplies.
  - 5.2.4 Maintain building interior surfaces, wall coverings, fabrics, furnishings, and floor surfaces.
  - 5.2.5 Perform facilities maintenance based on established standards.
  - 5.2.6 Analyze energy efficient methods.
  - 5.2.7 Demonstrate quality services in keeping with customer expectations.
- 5.3 Demonstrate sanitation procedures for a clean and safe environment.**
- 5.3.1 Analyze the various types of cleaning methods and their environmental effects.
  - 5.3.2 Summarize federal and state regulations regarding safe handling, use, and storage of chemicals.
  - 5.3.3 Apply Occupational Safety and Health Administration (OSHA) regulations to situations where blood borne pathogens exist and need to be labeled and carefully handled.
  - 5.3.4 Select a pest control system appropriate for the facility and the types of pests likely to be present.
  - 5.3.5 Apply Centers for Disease Control (CDC) standards.
  - 5.3.6 Apply the Americans with Disability Act (ADA) regulations.
- 5.4 Apply hazardous materials and waste management procedures.**
- 5.4.1 Carry out federal, state, and other regulations regarding waste management.
  - 5.4.2 Demonstrate a waste minimization plan.
  - 5.4.3 Practice a recycling program for conservation of resources.
  - 5.4.4 Record presence of hazardous materials and occurrence of hazardous situations accurately and communicate to appropriate authorities.

- 5.4.5 Determine procedures for safely handling and storing hazardous materials and waste products.
- 5.4.6 Design energy efficient methods.
- 5.4.7 Demonstrate safe storage and disposal of pesticides.

**5.5 Demonstrate a work environment that provides safety and security.**

- 5.5.1 Design procedures for external and internal emergencies.
- 5.5.2 Apply security procedures.
- 5.5.3 Demonstrate safe procedures in the use, care, and storage of equipment.
- 5.5.4 Apply safety and security procedures as required by Hazard Analysis and Critical Control Point (HACCP), Occupational Safety and Health Administration (OSHA), and other agencies.
- 5.5.5 Apply procedures for control of infection and infectious materials.

**5.6 Demonstrate laundering processes aligned with industry standards and regulations.**

- 5.6.1 Summarize the functions of machines and equipment used in laundry operations.
- 5.6.2 Demonstrate standard laundry procedures.
- 5.6.3 Apply procedures for the selection of textiles, chemicals, and equipment associated with laundry.
- 5.6.4 Apply industry regulations to laundry/linen systems.

**5.7 Demonstrate facilities management functions.**

- 5.7.1 Demonstrate quality customer service which exceeds customer expectations.
- 5.7.2 Demonstrate the elements involved in staff planning, recruiting, interviewing, selecting, hiring, and terminating of employees.
- 5.7.3 Design staff schedules.
- 5.7.4 Conduct orientation, regular training and education, and on the job training/retraining.
- 5.7.5 Demonstrate techniques and strategies to measure work quality of employees.
- 5.7.6 Apply principles of purchasing and receiving in facility management operations.
- 5.7.7 Implement procedures to control inventory.
- 5.7.8 Apply accounting principles in planning, forecasting, and recording profit and loss.
- 5.7.9 Develop a marketing plan for a business or department.

**MODEL IOWA COMPREHENSIVE OCCUPATIONAL COMPETENCIES (INDICATORS):**

1. Demonstrate the appropriate use of equipment and supplies.
2. Create and maintain a safe, clean, healthy and secure work environment.
3. Demonstrate oral, visual, written and non-verbal communication skills.

**ACADEMIC PROFICIENCIES (NO CHILD LEFT BEHIND):**

**Language Arts**

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks
- Demonstrates competence in speaking to provide, distribute, or find information
- Adapts listening strategies to utilize verbal and nonverbal content of communication
- Demonstrates competence in making oral formal and informal presentations, including selecting and using media

**Mathematics**

- Interprets charts, tables, and graphs
- Adds, subtracts, divides, multiplies whole and mixed numbers, fractions, and decimals

- Uses a calculator to add, subtract, divide, multiply whole and mixed numbers, decimals, calculate square root, percentages, and ratios
- Mentally adds, subtracts, divides, and multiplies whole numbers
- Understands and applies basic and advanced methods of measurement
- Precisely calculates areas, circumferences, perimeters, volume, and surface areas of geometric figures
- Solves problems and generates conclusions using deductive reasoning
- Understands geometric figures using visual perception and line and angle relationships
- Distinguishes characteristics of angles, circles, and arcs
- Measures angles
- Constructs lines, both parallel and perpendicular

### **Science**

- Uses computers for information processing
- Knows the environment impact of materials (solid, liquid, gaseous)
- Identifies acids and bases
- Describes and explains chemical reactions related to contamination

## **FAMILY**

**Standard 6: Evaluate the significance of family and its effects on the well being of individuals and society.**

### **BENCHMARKS:**

**6.1 Analyze the effects of family as a system on individuals and society.**

### **INDICATORS:**

- 6.1.1 Analyze family as the basic unit of society.
- 6.1.2 Analyze the role of family in transmitting societal expectations.
- 6.1.3 Analyze global influences on today's families.
- 6.1.4 Analyze the role of family in teaching culture and traditions across the life span.
- 6.1.5 Analyze the role of family in developing independence, interdependence, and commitment of family members.
- 6.1.6 Analyze the effects of change and transitions over the life course.
- 6.1.7 Analyze the ways family and consumer sciences careers assist the works of the family.

**6.2 Evaluate the effects of diverse perspectives, needs, and characteristics of individuals and families.**

- 6.2.1 Demonstrate awareness of multiple diversities and their effects on individuals, families, and society.
- 6.2.2 Analyze the effects of social and cultural diversity on individuals and families.
- 6.2.3 Analyze the effects of empathy for diversity on individuals in family, work, and community settings.
- 6.2.4 Demonstrate respect for diversity with sensitivity to anti-bias, gender, equity, age, culture, and ethnicity.
- 6.2.5 Analyze the effects of globalization and increasing diversity on individuals, families, and society.

### **MODEL IOWA COMPREHENSIVE OCCUPATIONAL COMPETENCIES (INDICATORS):**

1. Analyze the evolving roles of families across the life span.
2. Demonstrate respect for diversity and the impact on individuals and families.
3. Analyze the impact of family and consumer sciences careers on the family.

- Analyze the family as the basic unit of society.

**ACADEMIC PROFICIENCIES (NO CHILD LEFT BEHIND):**

**Language Arts**

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks
- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation
- Demonstrates competence in speaking to provide, distribute, or find information
- Adapts listening strategies to utilize verbal and nonverbal content of communication

**FAMILY AND COMMUNITY SERVICES**

**STANDARD 7: Synthesize knowledge, skills, and practices required for careers in family and community services.**

**BENCHMARKS:**

**7.1 Analyze career paths within family and community services.**

**INDICATORS:**

- 7.1.1 Explain the roles and functions of individuals engaged in family and community service careers.
  - 7.1.2 Analyze opportunities for employment and entrepreneurial endeavors.
  - 7.1.3 Summarize education and training requirements and opportunities for career paths in family and community services.
  - 7.1.4 Analyze the effects of family and community service occupations on local, state, national, and global economies.
  - 7.1.5 Demonstrate job acquisition skills to gain work-based learning opportunities and employment in family and community service careers.
  - 7.1.6 Analyze the role of professional organizations in family and community services professions.
- 7.2 Analyze factors related to providing family and community services.**
- 7.2.1 Describe local, state, and national agencies and informal support resources providing human services.
  - 7.2.2 Analyze professional, ethical, legal, and safety issues that confront human service employees.
  - 7.2.3 Summarize licensing laws and regulations that affect service providers and their participants.
  - 7.2.4 Analyze harmful, fraudulent, and deceptive human services practices.
  - 7.2.5 Summarize the rights and responsibilities of human services participants and their families.
  - 7.2.6 Analyze effective individuals and family advocacy and self-advocacy strategies to overcome diverse challenges facing human services participants.
  - 7.2.7 Analyze community-networking opportunities in family and community services.
- 7.3 Demonstrate professional behaviors, skills, and knowledge in providing family and community services.**
- 7.3.1 Apply rules, regulations, and work site policies that affect employer, employee, participant, and family rights and responsibilities.
  - 7.3.2 Demonstrate professional and ethical collaborative relationships with colleagues, support teams, participants, and families.

- 7.3.3 Maintain accurate and confidential documentation to be submitted in a timely manner to appropriate sources.
- 7.3.4 Analyze participants' strengths, needs, preferences, and interests across the life span through formal and informal assessment practices.
- 7.3.5 Demonstrate use of technology in human services.

**7.4 Evaluate conditions affecting individuals and families with a variety of disadvantaging conditions.**

- 7.4.1 Assess health, wellness, and safety issues of individuals and families with a variety of disadvantaging conditions.
- 7.4.2 Analyze management and living environment issues of individuals and families with a variety of disadvantaging conditions.
- 7.4.3 Analyze personal, social, emotional, economical, vocational, educational, and recreational issues for individuals and families with a variety of disadvantaging conditions.
- 7.4.4 Discriminate between situations that require personal prevention or intervention and those situations that require professional assistance.
- 7.4.5 Analyze situations which require crisis intervention.
- 7.4.6 Summarize the appropriate support needed to address selected human service issues.

**7.5 Identify services for individuals and families with a variety of disadvantaging conditions.**

- 7.5.1 Describe needs and accommodations for people with a variety of disadvantaging conditions.
- 7.5.2 Analyze ways in which individuals with disadvantaging conditions affect the family and family members financially, socially, and emotionally.
- 7.5.3 Illustrate coping or adjustment strategies and stress management practices for the participant, a caregiver, and family members.
- 7.5.4 Summarize the importance of friends, family, and community relationships for an individual with a variety of disadvantaging conditions.
- 7.5.5 Demonstrate ways to provide support that validates the participant's capabilities and right to privacy, dignity, and autonomy.
- 7.5.6 Demonstrate strategies that help participants make informed choices, access resources and support, follow through on responsibilities, and take appropriate risks.
- 7.5.7 Demonstrate verbal and nonverbal communication skills that support individuals and families with a variety of disadvantaging conditions.

**MODEL IOWA COMPREHENSIVE OCCUPATIONAL COMPETENCIES (INDICATORS):**

1. Analyze the basic skills necessary to maintain personal, physical and mental health.
2. Identify personal safety and survival skills.
3. Identify substance abuse, use and non-use.
4. Research procedures for prevention and control of diseases.
5. Identify the needs and concerns of populations with special needs.
6. Analyze family-individual health related occupations.
7. Identify family/individual health resources.
8. Identify resources for populations with special needs.

**ACADEMIC PROFICIENCIES (NO CHILD LEFT BEHIND):**

**Language Arts**

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks
- Demonstrates competence in speaking to provide, distribute, or find information

- Demonstrates competence in writing, editing, and proofing reports, summaries, and documentation using correct English spelling, grammar, and punctuation
- Adapts listening strategies to utilize verbal and nonverbal content of the communication

### **Mathematics**

- Interprets charts, tables, and graphs

### **Science**

- Analyzes drugs impact on society
- Uses computers for information processing
- Applies and uses maps, charts, tables, and graphs to complete tasks

## **FOOD PRODUCTION AND SERVICES**

### **STANDARD 8: Integrate knowledge, skills, and practices required for careers in food production and services.**

#### **BENCHMARKS:**

#### **8.1 Analyze career paths within the food production and food services industries.**

#### **INDICATORS:**

- 8.1.1 Explain the roles, duties, and functions of individuals engaged in food production and services careers.
- 8.1.2 Analyze opportunities for employment and entrepreneurial endeavors.
- 8.1.3 Summarize education and training requirements and opportunities for career paths in food production and services.
- 8.1.4 Analyze the effects of food production and services occupations on local, state, national, and global economies.
- 8.1.5 Create an employment portfolio for use with applying for internships and work-based learning opportunities.
- 8.1.6 Analyze the role of professional organizations in food production and services.

#### **8.2 Demonstrate food safety and sanitation procedures.**

- 8.2.1 Identify characteristics of major food borne pathogens, their role in causing illness, foods involved in outbreaks, and methods of prevention.
- 8.2.2 Employ food service management safety/sanitation program procedures, including Cardiac Pulmonary Resuscitation (CPR) and first aid.
- 8.2.3 Use knowledge of systems for documenting, investigating, reporting, and preventing food borne illness.
- 8.2.4 Use the Hazard Analysis Critical Control Point (HACCP) and crisis management principles and procedures during food handling processes to minimize the risks of food borne illness.
- 8.2.5 Practice good personal hygiene/health procedures, including dental health and weight management, and report symptoms of illness.
- 8.2.6 Demonstrate proper purchasing, receiving, storage, and handling of both raw and prepared foods.
- 8.2.7 Demonstrate safe food handling and preparation techniques that prevent cross contamination from potentially hazardous foods, between raw and ready-to-eat foods, and between animal and fish sources and other food products.
- 8.2.8 Analyze current types of cleaning materials and sanitizers for proper use and safety hazards.
- 8.2.9 Use Occupational Safety and Health Administration's (OSHA) Right to Know Law and Material Safety Data Sheets (MSDS) and explain their requirements in safe handling and storage of hazardous materials.

- 8.2.10 Demonstrate safe and environmentally responsible waste disposal and recycling methods.
  - 8.2.11 Demonstrate ability to maintain necessary records to document time and temperature control, HACCP, employee health, maintenance of equipment, and other elements of food preparation, storage, and presentation.
- 8.3 Demonstrate industry standards in selecting, using, and maintaining food production and food service equipment.**
- 8.3.1 Operate tools and equipment following safety procedures and OSHA requirements.
  - 8.3.2 Maintain tools and equipment following safety procedures and OSHA requirements.
  - 8.3.3 Demonstrate procedures for cleaning and sanitizing equipment, serving dishes, glassware, and utensils to meet industry standards and OSHA requirements.
  - 8.3.4 Analyze equipment purchases based on long-term business needs, specific regulations, and codes related to foods.
  - 8.3.5 Demonstrate procedures for safe and secure storage of equipment and tools.
  - 8.3.6 Identify a variety of types of equipment for food processing, cooking, holding, storing, and serving, including hand tools and small ware.
- 8.4 Demonstrate menu planning principles and techniques based on standardized recipes to meet customer needs.**
- 8.4.1 Use computer based menu systems to develop and modify menus.
  - 8.4.2 Apply menu planning principles to develop and modify menus.
  - 8.4.3 Analyze food, equipment, and supplies needed for menus.
  - 8.4.4 Develop a variety of menu layouts, themes and design styles.
  - 8.4.5 Prepare requisitions for food, equipment, and supplies to meet production requirements.
  - 8.4.6 Record performance of menu items to analyze sales and determine menu revisions.
  - 8.4.7 Apply principles of measurement, portion control, conversions, food cost analysis and control, menu terminology, and menu pricing to menu planning.
- 8.5 Demonstrate professional food preparation methods and techniques for all menu categories to produce a variety of food products that meet customer needs.**
- 8.5.1 Demonstrate professional skills in safe handling of knives, tools, and equipment.
  - 8.5.2 Demonstrate professional skills for a variety of cooking methods including roasting, broiling, smoking, grilling, sautéing, pan frying, deep frying, braising, stewing, poaching, steaming, and baking using professional equipment and current technologies.
  - 8.5.3 Utilize weights and measurement tools to demonstrate knowledge of portion control and proper scaling and measurement techniques.
  - 8.5.4 Apply the fundamentals of time, temperature, and cooking methods to cooking, cooling, reheating, and holding of a variety of foods.
  - 8.5.5 Prepare various meats, seafood, and poultry using safe handling and professional preparation techniques.
  - 8.5.6 Prepare various stocks, soups, and sauces using safe handling and professional preparation techniques.
  - 8.5.7 Prepare various fruits, vegetables, starches, legumes, dairy products, fats, and oils using safe handling and professional preparation techniques.
  - 8.5.8 Prepare various salads, dressings, marinades, and spices using safe handling and professional preparation techniques.
  - 8.5.9 Prepare sandwiches, canapés, and appetizers using safe handling and professional preparation techniques.
  - 8.5.10 Prepare breads, baked good and desserts using safe handling and professional preparation techniques.

- 8.5.11 Prepare breakfast meats, eggs, cereals, and batter products using safe handling and professional preparation techniques.
- 8.5.12 Demonstrate professional plating, garnishing, and food preparation techniques.
- 8.5.13 Examine the applicability of convenience food items.
- 8.5.14 Demonstrate cooking methods that increase nutritional value, lower calorie and fat content, and utilize herbs and spices to enhance flavor.

**8.6 Demonstrate implementation of food service management and leadership functions.**

- 8.6.1 Apply principles of purchasing, issuing, and storing in food service operations.
- 8.6.2 Practice inventory procedures including first in/first out concept, date markings, and specific record keeping.
- 8.6.3 Apply accounting procedures in planning and forecasting profit and loss.
- 8.6.4 Examine the areas of risk management and legal liability within the food service industry.
- 8.6.5 Apply human resource policies including rules, regulations, laws, hiring, compensation, overtime, discrimination, and harassment.
- 8.6.6 Apply the procedures involved in staff planning, recruiting, interviewing, selecting, performance reviewing, and terminating of employees.
- 8.6.7 Conduct staff orientation, training consistent reinforcement of training standards and education, and on-the-job training/retraining.
- 8.6.8 Implement marketing plan for food service operations.
- 8.6.9 Design internal/external crisis management and disaster plans and response procedures.
- 8.6.10 Apply principles of inventory management, labor cost and control techniques, production planning and control, and facilities management to front and back of the house operations.

**8.7 Demonstrate the concept of internal and external customer service.**

- 8.7.1 Analyze the role of quality service as a strategic component of exceptional external customer service.
- 8.7.2 Demonstrate quality services that meet industry standards in the food service industry.
- 8.7.3 Analyze the relationship between employees and customer satisfaction.
- 8.7.4 Apply strategies for addressing and resolving complaints.
- 8.7.5 Demonstrate sensitivity to diversity and individuals with special needs.

**MODEL IOWA COMPREHENSIVE OCCUPATIONAL COMPETENCIES (INDICATORS):**

1. Analyze food-related occupations.
2. Create and maintain a safe, clean, healthy and secure environment.
3. Demonstrate the use of recipes in food planning, preparation, and presentation.

**ACADEMIC PROFICIENCIES (NO CHILD LEFT BEHIND):**

**Language Arts**

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks
- Demonstrates competence in speaking to provide, distribute, or find information
- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation
- Follows written and oral directions to complete tasks
- Informally discusses, requests, and supplies information to associates
- Adapts listening strategies to utilize verbal and nonverbal content of communication

## **Mathematics**

- Interprets charts, tables, and graphs
- Adds, subtracts, divides, multiplies whole and mixed numbers, fractions, and decimals
- Uses a calculator to add, subtract, divide, multiply whole and mixed numbers, decimals, calculate square root, percentages, and ratios
- Mentally adds, subtracts, divides, and multiplies whole numbers
- Measures time, temperature, volume, and weight
- Converts word problems to mathematical expressions
- Uses inductive and deductive reasoning to solve problems
- Distinguishes proportions and congruence
- Identifies the application of statistical processes
- Uses a calculator or computer to manipulate formulas
- Understands and applies basic and advanced methods of measurement
- Calculates and evaluates algebraic expressions; and solves problems and generates conclusions using deductive reasoning

## **Science**

- Knows effect of chemicals on humans and plants
- Analyzes and evaluates environmental issues related to waste management
- Applies and uses laboratory techniques safely
- Applies and uses maps, charts, tables and graphs to complete tasks
- Applies and uses scientific methods to solve problems
- Converts measurement units from metric to English and metric
- Describes and explains heat conduction/convection, insulation requirements, radiant heating, temperature, and converts Fahrenheit to centigrade and vice versa
- Measures time to complete a task
- Measures weight, temperature, time and the volumes of liquids and solids
- Uses computers for information processing
- Describes and explains chemical reactions including inhibitors
- Describes and explains the energy conversion process
- Describes and explains pulleys and levers as work saving devices
- Knows the environmental impact of materials (solid, liquid, gaseous)
- Understands the effect of chemicals on humans and plants
- Understands the interaction of organisms with their environment
- Describes the immune system, the digestive system, selected diseases, and causes of weight gain and loss

## **FOOD SCIENCES, DIETETICS, AND NUTRITION**

**STANDARD 9: Integrate knowledge, skills, and practices required for careers in food science, dietetics, and nutrition.**

### **BENCHMARKS:**

**9.1 Analyze career paths within food science, dietetics, and nutrition industries.**

### **INDICATORS:**

- 9.1.1 Explain the roles and functions of individuals engaged in food science, food technology, dietetics, and nutrition careers.
- 9.1.2 Analyze opportunities for employment and entrepreneurial endeavors.
- 9.1.3 Summarize education and training requirements and opportunities for career paths in food science, food technology, dietetics, and nutrition.

- 9.1.4 Analyze the impact of food science, dietetics, and nutrition occupations on local, state, national, and global economies.
  - 9.1.5 Create an employment portfolio for use with applying for internships and work-based learning opportunities in food science, food technology, dietetics, and nutrition careers.
  - 9.1.6 Analyze the role of professional organizations in food science, food technology, dietetics, and nutrition careers.
- 9.2 Apply risk management procedures to food safety, food testing, and sanitation.**
- 9.2.1 Analyze factors that contribute to food borne illness.
  - 9.2.2 Analyze food service management safety/sanitation programs.
  - 9.2.3 Implement industry standards for documenting, investigating, and reporting food borne illnesses.
  - 9.2.4 Use the Hazard Analysis Critical Control Point (HACCP) during all food handling processes to minimize the risks of food borne illness.
  - 9.2.5 Demonstrate practices and procedures that assure personal and workplace health and hygiene.
  - 9.2.6 Demonstrate standard procedures for receiving and storage of raw and prepared foods.
  - 9.2.7 Classify current types of cleaning materials and sanitizers and their proper use.
  - 9.2.8 Use Occupational Safety and Health Administration's (OSHA) Right to Know Law and Material Safety Sheets (MSDS) and explain their requirements in handling hazardous materials.
  - 9.2.9 Demonstrate waste disposal and recycling methods.
- 9.3 Evaluate nutrition principles, food plans, preparation techniques, and specialized dietary plans.**
- 9.3.1 Analyze nutrient requirements across the life span addressing the diversity of people, culture, and religions.
  - 9.3.2 Analyze nutritional data.
  - 9.3.3 Apply principles of food production to maximize nutrient retention in prepared foods.
  - 9.3.4 Assess the influence of socioeconomic and psychological factors on food and nutrition and behavior.
  - 9.3.5 Analyze recipe/formula proportions and modifications for food production.
  - 9.3.6 Critique the selection of foods to promote a healthy lifestyle.
  - 9.3.7 Categorize foods into exchange groups and plan menus, applying the exchange system to meet various nutrient needs.
- 9.4 Apply basic concepts of nutrition and nutritional therapy in a variety of settings.**
- 9.4.1 Analyze nutritional needs of individuals.
  - 9.4.2 Use nutritional information to support care planning.
  - 9.4.3 Utilize a selective menu.
  - 9.4.4 Construct a modified diet based on nutritional needs and health conditions.
  - 9.4.5 Design instruction on nutrition for health maintenance and disease prevention.
- 9.5 Demonstrate use of current technology in food product development and marketing.**
- 9.5.1 Analyze various factors that affect food preferences in the marketing of food.
  - 9.5.2 Analyze data in statistical analysis in making development and marketing decisions.
  - 9.5.3 Prepare food for presentation and assessment.
  - 9.5.4 Maintain test kitchen/laboratory and related equipment and supplies.
  - 9.5.5 Implement procedures that affect quality product performance.
  - 9.5.6 Conduct sensory evaluations of food products.
  - 9.5.7 Conduct testing for safety of food products, utilizing available technology.

**9.6 Demonstrate food science, dietetics, and nutrition management principles and practices.**

- 9.6.1 Build menus to customer/client preferences.
- 9.6.2 Implement food preparation, production, and testing systems.
- 9.6.3 Apply standards for food quality.
- 9.6.4 Create standardized recipes.
- 9.6.5 Manage amounts of food to meet needs of customers and clients.
- 9.6.6 Analyze new products.
- 9.6.7 Implement procedures that provide cost effective products.
- 9.6.8 Establish par levels for the purchase of supplies based on an organization's needs.
- 9.6.9 Utilize Food Code Points of time, temperature, date markings, cross contamination, hand washing, and personal hygiene as criteria for safe food preparation.

**MODEL IOWA COMPREHENSIVE OCCUPATIONAL COMPETENCIES (INDICATORS):**

1. Analyze nutritional needs and select foods for good health throughout life.
2. Analyze cultural and regional influences on dietary needs.
3. Analyze nutritional information to prepare foods for good health throughout life.

**ACADEMIC PROFICIENCIES (NO CHILD LEFT BEHIND):**

**Language Arts**

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks
- Demonstrates competence in speaking to provide, distribute, or find information
- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation
- Demonstrates competence in speaking to provide, distribute, or find information
- Demonstrates competence in making oral formal and informal presentations, including selecting and using media
- Adapts listening strategies to utilize verbal and nonverbal content of communication
- Informally discusses, requests, and supplies information to associates

**Mathematics**

- Interprets charts, tables, and graphs
- Uses inductive and deductive reasoning to solve problems
- Distinguishes proportions and congruence
- Identifies the application of statistical processes
- Measures time, temperature, volume, and weight
- Mentally, manually, and by calculator, adds, subtracts, divides, multiplies whole and mixed numbers, fractions, decimals; calculates square root, percentages, and formulas
- Understands and applies basic and advanced methods of measurement
- Calculates and evaluates basic statistical routines
- Distinguishes proportions and congruence
- Estimates and rounds to determine estimated outcomes
- Formulates and verifies mathematical questions, determines the validity arguments, and establishes conclusions
- Identifies missing or irrelevant information when solving mathematical problems
- Interprets common symbols such as <, >, and =
- Understands sampling theory, probability theory, and error of measure
- Calculates and evaluates algebraic expressions; and solves problems and generates conclusions using deductive reasoning

## Science

- Understands the effect of chemicals on humans and plants
- Analyzes and evaluates environmental issues related to waste management
- Applies and uses laboratory techniques safely
- Applies and uses maps, charts, tables and graphs to complete tasks
- Applies and uses scientific methods to solve problems
- Converts measurement units from metric
- Describes and explains heat conduction/convection, insulation requirements, radiant heating, and temperature
- Measures weight, temperature, time and the volumes of liquids and solids
- Analyzes and evaluates food additives, MSG, and vitamins
- Uses computers for information processing
- Measures temperature using Fahrenheit and centigrade scales
- Describes and explains the relationship of heat and temperature
- Measures time to complete a task
- Knows the environmental impact of materials (solid, liquid, gaseous)
- Understands the interaction of organisms with their environment
- Describes the immune system, the digestive system, selected diseases, and causes of weight gain and loss
- Describes and explains pulleys and levers as work saving devices

## **HOSPITALITY, TOURISM, AND RECREATION**

**STANDARD 10: Integrate knowledge, skills, and practices required for careers in hospitality, tourism, and recreation.**

### **BENCHMARKS:**

**10.1 Analyze career paths within the hospitality, tourism, and recreation industries.**

#### **INDICATORS:**

- 10.1.1 Explain the roles and functions of individuals engaged in hospitality, tourism, and recreation careers.
  - 10.1.2 Analyze opportunities for employment and entrepreneurial endeavors.
  - 10.1.3 Summarize education and training requirements and opportunities for career paths in hospitality, tourism, and recreation.
  - 10.1.4 Examine the impact of hospitality, tourism, and recreation occupations on local, state, national, and global economies.
  - 10.1.5 Create an employment portfolio for use with applying for internships and work-based learning opportunities in hospitality, tourism, and recreation careers.
  - 10.1.6 Analyze the role of professional organizations in the hospitality, tourism, and recreation professions.
- 10.2 Demonstrate procedures applied to safety, security, and environmental issues.**
- 10.2.1 Explain the importance of safety, security, and environmental issues related to the hospitality, tourism, and recreation industries.
  - 10.2.2 Demonstrate procedures for assuring guest or customer safety.
  - 10.2.3 Evaluate evacuation plans and emergency procedures.
  - 10.2.4 Demonstrate management and conservation of resources for energy efficiency and protection of the environment.
  - 10.2.5 Design a system for documenting, investigating, and taking action on safety, security, and environmental issues.
- 10.3 Apply concepts of quality service to assure customer satisfaction.**

- 10.3.1 Apply industry standards for service methods that meet expectations of guests or customers.
- 10.3.2 Analyze the relationship between employee attitude, appearance, and actions and guest or customer satisfaction.
- 10.3.3 Apply a system to evaluate and resolve employee, employer, guest, or customer complaints.
- 10.3.4 Analyze effects of customer relations on success of the hospitality, tourism, and recreation industry.
- 10.3.5 Analyze effects of customer relations on meeting the hospitality, tourism, and recreation needs of special populations.

**10.4 Demonstrate practices and skills involved in lodging occupations.**

- 10.4.1 Demonstrate front desk, office, and customer service skills.
- 10.4.2 Perform cash handling, accounting, and financial transactions.
- 10.4.3 Manage convention, meeting, and banquet support functions.
- 10.4.4 Apply basic food preparation and service skills in catering operations.
- 10.4.5 Manage use, care, storage, maintenance, and safe operations of equipment, tools, and supplies.
- 10.4.6 Apply facility management, maintenance, and service skills to lodging operations.
- 10.4.7 Apply time and work management skills to facility service tasks.
- 10.4.8 Analyze sales and marketing functions in lodging operations.

**10.5 Demonstrate practices and skills for travel related services.**

- 10.5.1 Examine geography, climate, sites, and time zones of various regions and countries.
- 10.5.2 Examine lodging, tourism, and recreation customs of various regions and countries.
- 10.5.3 Apply knowledge of food, beverage, and etiquette of various regions and countries to decisions about lodging, tourism, and recreation.
- 10.5.4 Assemble information needed for domestic and international travel.
- 10.5.5 Produce travel documents and itineraries, utilizing current technologies.
- 10.5.6 Monitor travel arrangements using computerized systems.

**10.6 Demonstrate management of recreation, leisure, and other programs and events.**

- 10.6.1 Coordinate client inquiries and requests.
- 10.6.2 Design themes, time lines, budgets, agendas, and itineraries.
- 10.6.3 Organize locations, facilities, suppliers, and vendors for specific services.
- 10.6.4 Prepare for distribution of event materials.
- 10.6.5 Demonstrate skills related to promoting and publicizing events.
- 10.6.6 Manage programs and events for specific age groups or diverse populations.
- 10.6.7 Promote wellness through recreation and leisure programs and events.

**MODEL IOWA COMPREHENSIVE OCCUPATIONAL COMPETENCIES (INDICATORS):**

1. Demonstrate employability-related skills.

**ACADEMIC PROFICIENCIES (NO CHILD LEFT BEHIND):**

**Language Arts**

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks
- Demonstrates competence in speaking to provide, distribute, or find information

**Mathematics**

- Interprets charts, tables, and graphs

## Science

- Uses computers for information processing

## HOUSING AND INTERIOR DESIGN

**STANDARD 11: Integrate knowledge, skills, and practices required for careers in housing and interior design.**

**BENCHMARKS:**

**11.1 Analyze career paths within the housing, interior design, and furnishings industries.**

**INDICATORS:**

- 11.1.1 Explain the roles and functions of individuals engaged in housing and interior design careers.
  - 11.1.2 Analyze career paths and opportunities for employment and entrepreneurial endeavors.
  - 11.1.3 Summarize education, training, and credentialing requirements and opportunities for career paths in housing and interior design.
  - 11.1.4 Analyze the impact of housing and interior design careers on local, state, national, and global economies.
  - 11.1.5 Create an employment portfolio for use with applying for internships and work-based learning opportunities in housing and interior design careers.
  - 11.1.6 Analyze the role of professional organizations in housing and interior design professions.
  - 11.1.7 Analyze the attitudes, traits, and values of professional responsibility, accountability and effectiveness required for careers in housing and interior design.
- 11.2 Evaluate housing and design concepts and theories, including green design, in relation to available resources and options.**
- 11.2.1 Evaluate the use of elements and principles of design in housing and commercial and residential interiors.
  - 11.2.2 Analyze the psychological impact that the principles and elements of design have on the individual.
  - 11.2.3 Analyze the effects that the principles and elements of design have on aesthetics and function.
  - 11.2.4 Apply principles of human behavior such as ergonomics and anthropometrics to design of housing, interiors, and furnishings.
- 11.3 Apply housing and interior design knowledge, skills and processes to meet specific design needs.**
- 11.3.1 Analyze product information, including but not limited to floor coverings, wall coverings, textiles, window treatments, furniture, lighting fixtures, kitchen and bath fixtures and equipment.
  - 11.3.2 Evaluate manufacturers, products and materials considering environmental protection, care and maintenance, and safety.
  - 11.3.3 Demonstrate measuring, estimating, ordering, purchasing, pricing, and repurposing skills.
  - 11.3.4 Appraise various interior furnishings, fixtures, appliances, and equipment to provide cost and quality choices for clients.
  - 11.3.5 Examine the impact of housing, interiors, and furnishing on health, safety, and welfare of the public.
  - 11.3.6 Demonstrate design processes such as determining the scope of the project, programming, research, concept development, proposal, schematic design, design

drawings, and design presentation development.

**11.4 Demonstrate construction document reading, and space planning skills required for the housing, interiors, and furnishings industry.**

- 11.4.1 Interpret information provided on construction documents.
- 11.4.2 Evaluate floor plans for efficiency and safety in areas including but not limited to zones, traffic patterns, storage, electrical, and mechanical systems.
- 11.4.3 Draft an interior space to scale using architecture symbols.
- 11.4.4 Arrange furniture placement with reference to principles of design, traffic flow, activity, and existing architectural features.
- 11.4.5 Apply building codes, universal guidelines, and regulations in space planning and furniture arrangement.
- 11.4.6 Demonstrate graphic communication skills (CAD, PowerPoint, sketching).

**11.5 Analyze influences on architectural and furniture design and development.**

- 11.5.1 Describe features of furnishings that are characteristic of various historical periods.
- 11.5.2 Explain societal and technological trends on periods of architecture and interiors through the ages.
- 11.5.3 Illustrate the development of architectural styles throughout history.
- 11.5.4 Compare and contrast historical architectural details to current housing and interior design trends.
- 11.5.5 Analyze future design and development trends in architecture, interiors, and furnishings.

**11.6 Evaluate client's needs, goals, and resources in creating design plans for housing, furnishings, and residential and commercial interiors.**

- 11.6.1 Assess human needs, safety, space, and technology as they relate to housing and interior design.
- 11.6.2 Assess financial resources needed to improve interior space.
- 11.6.3 Assess client's community, family, and financial resources needed to achieve housing and interior design goals.
- 11.6.4 Assess a variety of available resources for housing and interior design including ergonomic and anthropometric data.
- 11.6.5 Critique design plans to address client's needs, goals, and resources.
- 11.6.6 Justify design solutions relative to client needs, including diversity and cultural needs, and the design process.

**11.7 Apply design knowledge, skills, processes and theories, and oral, written and visual presentation skills to communicate design ideas.**

- 11.7.1 Select appropriate studio tools.
- 11.7.2 Prepare sketches, elevations, and renderings using appropriate media.
- 11.7.3 Prepare visual presentations including legends, keys, and schedules.
- 11.7.4 Utilize a variety of presentation media such as photography, video, computer, and software for client presentations.
- 11.7.5 Utilize applicable building codes, universal guidelines, and regulations in space planning.
- 11.7.6 Create floor plans using architectural drafting skills.

**11.8 Demonstrate general procedures for business profitability and career success.**

- 11.8.1 Examine legislation, regulations, and public policy that impact residential and commercial interior design as well as the housing and furnishings industries.
- 11.8.2 Analyze personal and employer responsibilities and liabilities regarding industry related safety, security, and environmental factors.

- 11.8.3 Describe security and inventory control strategies, laws and regulations, and worksite policies and procedures that affect loss prevention and profit.
- 11.8.4 Demonstrate procedures for reporting and handling accidents, safety, and security incidents.
- 11.8.5 Apply procedures for maintaining inventory control and loss prevention, including cash and credit transactions.
- 11.8.6 Analyze operational costs such as mark ups, mark downs, cash flow, and other factors affecting profit.
- 11.8.7 Demonstrate knowledge of the arts, of various resources, and of cultural impact upon design industries.
- 11.8.8 Demonstrate knowledge of multi-disciplinary collaborations and consensus building skills needed in practice.

**11.9 Develop a global view to weigh design decisions within the parameters of ecological, socioeconomic, and cultural contexts within housing, furnishings, and interiors.**

**MODEL IOWA COMPREHENSIVE OCCUPATIONAL COMPETENCIES (INDICATORS):**

1. Analyze past, present, and potential future trends in housing, both locally and globally.
2. Analyze basic financial and legal aspects of housing in a variety of situations.
3. Evaluate housing alternatives based on floor plans, structure, maintenance, safety, energy, lifestyles and special needs).
4. Create designs based upon the principles and elements of design.
5. Evaluate home furnishings and appliances.
6. Investigate careers related to housing, interiors, and furnishings.
7. Analyze resources for managing and maintaining a home.
8. Analyze potential safety, sanitation and security.
9. Demonstrate the use of current technology to design, analyze and decorate a home environment based upon client needs.
10. Identify, plan and compute the finances for purchasing, renting, building or remodeling a home.
11. Demonstrate appropriate workplace skills necessary for a career in the housing industry.
12. Construct and/or read scaled drawings and floor plans.
13. Evaluate the quality, construction and design technology of all materials used in the home.

**ACADEMIC PROFICIENCIES (NO CHILD LEFT BEHIND):**

**Language Arts**

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks
- Demonstrates competence in speaking to provide, distribute, or find information
- Demonstrates competence in making oral formal and informal presentations, including selecting and using media
- Adapts listening strategies to utilize verbal and nonverbal content of communication
- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation

**Mathematics:**

- Constructs and interprets charts, tables, and graphs
- Adds, subtracts, divides, multiplies whole and mixed numbers, fractions, and decimals
- Uses a calculator to add, subtract, divide, multiply whole and mixed numbers, decimals, and calculate square root, calculate percentages, ratios, and formulas
- Mentally adds, subtracts, divides, and multiplies whole numbers
- Precisely calculates areas, circumferences, perimeters, and surface areas of geometric figures

- Estimates and rounds to determine estimated outcomes
- Measures distance, using standard measurement tools
- Distinguishes proportions and congruence
- Identifies the application of statistical processes
- Constructs angles, geometric figures, and lines
- Distinguishes characteristics of angles, circles, and arcs
- Interprets common symbols such as  $<$ ,  $>$ , and  $=$
- Identifies parallel/perpendicular, vertical/horizontal lines, and line rays/segments

**Science:**

- Uses computers for information processing
- Analyzes and evaluates environmental issues

## HUMAN DEVELOPMENT

**STANDARD 12:** Analyze factors that influence human growth and development.

**BENCHMARKS:**

**12.1 Analyze principles of human growth and development across the life span.**

**INDICATORS:**

- 12.1.1 Analyze physical, emotional, social, spiritual, and intellectual development.
- 12.1.2 Analyze interrelationships among physical, emotional, social and intellectual aspects of human growth and development.
- 12.1.3 Analyze current and emerging research about human growth and development, including research on brain development.

**12.2 Analyze conditions that influence human growth and development.**

- 12.2.1 Analyze the effect of heredity and environment on human growth and development.
- 12.2.2 Analyze the effect of social, economic, and technological forces on individual growth and development.
- 12.2.3 Analyze the effects of gender, ethnicity, and culture on individual development.
- 12.2.4 Analyze the effects of life events on individuals' physical, intellectual, social, moral, and emotional development.
- 12.2.5 Analyze geographic, political, and global influences on human growth and development.

**12.3 Analyze strategies that promote growth and development across the life span.**

- 12.3.1 Analyze the role of nurturance on human growth and development.
- 12.3.2 Analyze the role of communication on human growth and development.
- 12.3.3 Analyze the role of family and social services support systems in meeting human growth and development needs.

**MODEL IOWA COMPETENCIES (INDICATORS):**

1. Analyze the interrelationship between physical, emotional, social, and intellectual aspects of human growth and development.
2. Investigate the impact of heredity and environment on human growth and development.
3. Demonstrate communication and nurturing skills that promote human growth and development.

**ACADEMIC PROFICIENCIES (NO CHILD LEFT BEHIND):**

**Language Arts**

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks

### Science

- Describes human development processes

## INTERPERSONAL RELATIONSHIPS

**STANDARD 13: Demonstrate respectful and caring relationships in the family, workplace, and community.**

### **BENCHMARKS:**

**13.1 Analyze functions and expectations of various types of relationships.**

### **INDICATORS:**

- 13.1.1 Analyze processes for building and maintaining interpersonal relationships.
- 13.1.2 Predict the effects of various stages of the family life cycle on interpersonal relationships.
- 13.1.3 Compare physical, emotional, spiritual, and intellectual functioning in stable and unstable relationships.
- 13.1.4 Analyze factors that contribute to healthy and unhealthy relationships.
- 13.1.5 Analyze processes for handling unhealthy relationships.
- 12.1.6 Demonstrate stress management strategies for family, work, and community settings.

**13.2 Analyze personal needs and characteristics and their effects on interpersonal relationships.**

- 13.2.1 Analyze the effects of personal characteristics on relationships.
- 13.2.2 Analyze the effect of personal needs on relationships.
- 13.2.3 Analyze the effects of self-esteem and self-image on relationships.
- 13.2.4 Analyze the effects of life span events and conditions on relationships.
- 13.2.5 Explain the effects of personal standards and behaviors on interpersonal relationships.

**13.3 Demonstrate communication skills that contribute to positive relationships.**

- 13.3.1 Analyze communication styles and their effects on relationships.
- 13.3.2 Demonstrate verbal and nonverbal behaviors and attitudes that contribute to effective communication.
- 13.3.3 Demonstrate effective listening and feedback techniques.
- 13.3.4 Analyze strategies to overcome communication barriers in family, community, and work settings.
- 13.3.5 Apply ethical principles of communication in family, community, and work settings.
- 13.3.6 Analyze the effects of communication technology in family, work, and community settings.
- 13.3.7 Analyze the roles and functions of communication in family, work, and community settings.

**13.4 Evaluate effective conflict prevention and management techniques.**

- 13.4.1 Analyze the origin and development of attitudes and behaviors regarding conflict.
- 13.4.2 Explain how similarities and differences among people affect conflict prevention and management.
- 13.4.3 Apply the roles of decision making and problem solving in reducing and managing conflict.

- 13.4.4 Demonstrate nonviolent strategies that address conflict.
- 13.4.5 Demonstrate effective responses to harassment.
- 13.4.6 Assess community resources that support conflict prevention and management.

**13.5 Demonstrate teamwork and leadership skills in the family, workplace, and community.**

- 13.5.1 Create an environment that encourages and respects the ideas, perspectives, and contributions of all group members.
- 13.5.2 Demonstrate strategies to motivate, encourage, and build trust in group members.
- 13.5.3 Demonstrate strategies that utilize the strengths and minimize the limitations of team members.
- 13.5.4 Demonstrate techniques that develop team and community spirit.
- 13.5.5 Demonstrate ways to organize and delegate responsibilities.
- 13.5.6 Create strategies to integrate new members into the team.
- 13.5.7 Demonstrate processes for cooperating, compromising, and collaborating.

**13.6 Demonstrate standards that guide behavior in interpersonal relationships.**

- 13.6.1 Apply critical thinking and ethical criteria to evaluate interpersonal relationships.
- 13.6.2 Apply guidelines for assessing the nature of issues and situations.
- 13.6.3 Apply critical thinking and ethical standards when making judgments and taking action.
- 13.6.4 Demonstrate ethical behavior in family, workplace, and community settings.
- 13.6.5 Compare the relative merits of opposing points of view regarding current ethical issues.

**MODEL IOWA COMPREHENSIVE OCCUPATIONAL COMPETENCIES (INDICATORS):**

- 1. Analyze strategies for developing a positive self-concept

**ACADEMIC PROFICIENCIES (NO CHILD LEFT BEHIND):**

**Language Arts**

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks
- Demonstrates competence in speaking to provide, distribute, or find information
- Adapts listening strategies to utilize verbal and nonverbal content of communication
- Demonstrates competence in making oral formal and informal presentations, including selecting and using media

**NUTRITION AND WELLNESS**

**STANDARD 14: Demonstrate nutrition and wellness practices that enhance individual and family well-being.**

**BENCHMARKS:**

**14.1 Analyze factors that influence nutrition and wellness practices across the life span.**

**INDICATORS:**

- 14.1.1 Explain physical, emotional, social, psychological, and spiritual components of individual and family wellness.
- 14.1.2 Analyze the effects of psychological, cultural, and social influences on food choices and other nutrition practices.
- 14.1.3 Analyze the governmental, economic, and technological influences on food choices and practices.

- 14.1.4 Analyze the effects of global and local events and conditions on food choices and practices.
- 14.1.5 Analyze legislation and regulations related to nutrition and wellness.

**14.2 Evaluate the nutritional needs of individuals and families in relation to health and wellness across the life span.**

- 14.2.1 Analyze the effect of nutrients on health, appearance, and peak performance.
- 14.2.2 Analyze the relationship of nutrition and wellness to individual and family health throughout the life span.
- 14.2.3 Analyze the effects of food and diet fads, food addictions, and eating disorders on wellness.
- 14.2.4 Analyze sources of food and nutrition information, including food labels, related to health and wellness.

**14.3 Evaluate various dietary guidelines in planning to meet nutrition and wellness needs.**

- 14.3.1 Apply various dietary guidelines in planning to meet nutrition and wellness needs.
- 14.3.2 Design strategies that meet the health and nutrition requirements of individuals and families with special needs.
- 14.3.3 Demonstrate ability to select, store, prepare, and serve nutritious and aesthetically pleasing foods.

**14.4 Evaluate factors that affect food safety, from production through consumption.**

- 14.4.1 Analyze conditions and practices that promote safe food handling.
- 14.4.2 Analyze safety and sanitation practices throughout the food chain.
- 14.4.3 Analyze how changes in national and international food production and distribution systems influence the food supply.
- 14.4.4 Analyze federal, state, and local inspection and labeling systems that protect the health of individuals and the public.
- 14.4.5 Analyze food borne illness factors, including causes, foods at risk, and methods of prevention commercially and by individuals and families.
- 14.4.6 Analyze public dialogue about food safety and sanitation.

**14.5 Evaluate the influence of science and technology on food composition, safety, and other issues.**

- 14.5.1 Analyze how scientific and technical advances influence the nutrient content, availability, and safety of foods.
- 14.5.2 Analyze how the scientific and technical advances in food processing, storage, product development, and distribution influence nutrition and wellness.
- 14.5.3 Analyze the effects of technological advances on selection, preparation, and home storage of food.
- 14.5.4 Analyze the effects of food science and technology on meeting nutritional needs.

**MODEL IOWA COMPREHENSIVE OCCUPATIONAL COMPETENCIES (INDICATORS):**

1. Identify consumer options in nutrition, health and wellness.
2. Plan, prepare, serve and evaluate meals for good health throughout the lifespan.

**ACADEMIC PROFICIENCIES:**

**Language**

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks
- Demonstrates competence in speaking to provide, distribute, or find information

- Adapts listening strategies to utilize verbal and nonverbal content of communication

### **Mathematics**

- Adds, subtracts, divides, multiplies whole and mixed numbers, fractions, and decimals
- Uses a calculator to add, subtract, divide, multiply whole and mixed numbers, decimals, and calculate square root
- Mentally adds, subtracts, divides, and multiplies whole numbers

### **Science**

- Analyzes chemicals in society
- Analyzes and evaluates environmental issues
- Describes and explains diseases
- Identifies organisms such as bacteria and fungi
- Uses common laboratory equipment and procedures
- Applies and uses laboratory techniques safely
- Measures weight, temperature, time and the volumes of liquids and solids
- Applies and uses maps, charts, tables and graphs to complete tasks
- Describes human maintenance and weight gain or loss

## **PARENTING**

**STANDARD 15: Evaluate the impact of parenting roles and responsibilities on strengthening the well being of individuals and families.**

### **BENCHMARKS:**

#### **15.1 Analyze roles and responsibilities of parenting.**

##### **INDICATORS:**

- 15.1.1 Analyze parenting roles across the life span.
- 15.1.2 Analyze expectations and responsibilities of parenting.
- 15.1.3 Analyze consequences of parenting practices to the individual, family, and society.
- 15.1.4 Analyze societal conditions that influence parenting across the life span.
- 15.1.5 Explain cultural differences in roles and responsibilities of parenting.

#### **15.2 Evaluate parenting practices that maximize human growth and development.**

- 15.2.1 Choose nurturing practices that support human growth and development.
- 15.2.2 Apply communication strategies that promote positive self-esteem in family members.
- 15.2.3 Assess common practices and emerging research about discipline on human growth and development.
- 15.2.4 Assess the effects of abuse and neglect on children and families and determine methods for prevention.
- 15.2.5 Apply criteria for selecting care and services for children.

#### **15.3 Evaluate external support systems that provide services for parents.**

- 15.3.1 Assess community resources and services available to families.
- 15.3.2 Appraise community resources that provide opportunities related to parenting.
- 15.3.3 Summarize current laws and policies related to parenting.

#### **15.4 Analyze physical and emotional factors related to beginning the parenting process.**

- 15.4.1 Analyze biological processes related to prenatal development, birth, and health of child and mother.

- 15.4.2 Analyze the emotional factors of prenatal development and birth in relation to the health of parents and child.
- 15.4.3 Analyze implications of alternatives to biological parenthood.
- 15.4.4 Analyze legal and ethical impacts of current and emerging technology on fertility and family planning.

**MODEL IOWA COMPREHENSIVE OCCUPATIONAL COMPETENCIES (INDICATORS):**

1. Identify strategies that promote positive relationships between family members.
2. Evaluate factors that promote physical and emotional health of a child and parent/s.

**ACADEMIC PROFICIENCIES:**

**Language Arts**

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks
- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation
- Demonstrates competence in speaking to provide, distribute, or find information
- Adapts listening strategies to utilize verbal and nonverbal content of communication

**TEXTILES AND APPAREL**

**STANDARD 16: Integrate knowledge, skills, and practices required for careers in textiles and apparel.**

**BENCHMARKS:**

**16.1 Analyze career paths within textile, apparel, and design industries.**

**INDICATORS:**

- 16.1.1 Explain the roles and functions of individuals engaged in textiles, apparel, and design careers.
- 16.1.2 Analyze opportunities for employment and entrepreneurial endeavors.
- 16.1.3 Summarize education and training requirements and opportunities for career paths in textiles, apparel and design services.
- 16.1.4 Analyze the effects of textiles, apparel, and design occupations on local, state, national, and global economies.
- 16.1.5 Create an employment portfolio for use with applying for internships, work-based learning opportunities, and employment in textiles, apparel, and design industries.
- 16.1.6 Analyze the role of professional organizations in textiles, apparel, and design industries.

**16.2 Evaluate fiber and textile products and materials.**

- 16.2.1 Apply appropriate terminology for identifying, comparing, and analyzing the most common generic textile fibers.
- 16.2.2 Evaluate performance characteristics of textile fiber and fabrics.
- 16.2.3 Summarize textile legislation, standards, and labeling in the global economy.
- 16.2.4 Analyze effects of textile characteristics on design, construction, care, use, and maintenance of products.
- 16.2.5 Apply appropriate procedures for care of textile products.

**16.3 Demonstrate fashion, apparel and textile design skills.**

- 16.3.1 Explain the ways in which fabric, texture, and pattern can affect visual appearance.

- 16.3.2 Apply basic and complex color schemes and color theory to develop and enhance visual effects.
- 16.3.3 Utilize elements and principles of design in designing, constructing, and/or altering textile, apparel, and fashion products.
- 16.3.4 Demonstrate design concepts with fabric or technology/computer, using draping and/or flat pattern making technique.
- 16.3.5 Generate design that takes into consideration ecological, environmental, sociological, psychological, technical, and economic trends and issues.
- 16.3.6 Apply elements and principles of design to assist consumers and businesses in making decisions.
- 16.3.7 Demonstrate ability to use technology for fashion, apparel, and textile design.

**16.4 Demonstrate skills needed to produce, alter, or repair fashion, apparel, and textile products.**

- 16.4.1 Demonstrate professional skills in using a variety of equipment, tools, and supplies for fashion, apparel and textile construction, alteration, and repair.
- 16.4.2 Explain production processes for creating fibers, yarn, woven, and knit fabrics, and non-woven textile products.
- 16.4.3 Use appropriate industry products and materials for cleaning, pressing, and finishing textile, apparel, and fashion products.
- 16.4.4 Analyze current technology and trends that facilitate design and production of textile, apparel, and fashion products.
- 16.4.5 Demonstrate basic skills for producing and altering textile products and apparel.

**16.5 Evaluate elements of textile, apparel, and fashion merchandising.**

- 16.5.1 Apply marketing strategies for textile, apparel, and fashion products.
- 16.5.2 Analyze the cost of constructing, manufacturing, altering, or repairing textile, apparel, and fashion products.
- 16.5.3 Analyze ethical considerations for merchandizing apparel and textile products.
- 16.5.4 Apply external factors that influence merchandising.
- 16.5.5 Critique varied methods for promoting apparel and textile products.
- 16.5.6 Apply research methods, including forecasting techniques, for marketing apparel and textile products.

**16.6 Evaluate the components of customer service.**

- 16.6.1 Analyze factors that contribute to quality customer relations.
- 16.6.2 Analyze the influences of cultural diversity as a factor in customer relations.
- 16.6.3 Demonstrate the skills necessary for quality customer service.
- 16.6.4 Create solutions to address customer concerns.

**16.7 Demonstrate general operational procedures required for business profitability and career success.**

- 16.7.1 Analyze legislation, regulations, and public policy affecting the textile, apparel, and fashion industries.
- 16.7.2 Analyze personal and employer responsibilities and liabilities regarding industry-related safety, security, and environmental factors.
- 16.7.3 Analyze the effects of security and inventory control strategies, cash and credit transaction methods, laws, and worksite policies, on loss prevention and store profit.
- 16.7.4 Demonstrate procedures for reporting and handling accidents, safety, and security incidents.
- 16.7.5 Analyze operational costs such as mark ups, mark downs, cash flow, and other factors affecting profit.

16.7.6 Demonstrate knowledge of the arts, of various resources, and cultural impact upon the textile, apparel, and fashion industries.

**MODEL IOWA COMPETENCIES (INDICATORS):**

1. Assess the importance of appearance, first impressions and self expression through clothing.
2. Plan and evaluate clothing and accessory purchases to meet clothing needs on a budget.
3. Identify fabrics, fabric construction, finishes and fabric care.
4. Create and design clothing based upon the elements and principles of clothing design.
5. Appropriately operate and maintain all sewing equipment.
6. Follow preparation procedures for constructing and evaluating a sewing project.
7. Demonstrate repair, alteration and recycling techniques.
8. Demonstrate the use of equipment, fabrics and supplies with proper procedures for both ready-to-wear and constructed garments.
9. Create and maintain an organized, safe and convenient work environment.
10. Develop appropriate oral, visual, written and non-verbal communication skills.
11. Analyze company, state and federal laws and guidelines of the clothing and textile industry.
12. Identify skills needed for careers in the clothing and textile industry.
13. Identify clothing and textile careers and resources.

**ACADEMIC PROFICIENCIES (NO CHILD LEFT BEHIND):**

**Language Arts**

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts and vocabulary
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks
- Adapts listening strategies to utilize verbal and nonverbal content of communication
- Demonstrates competence in speaking to provide, distribute, or find information
- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation

**Mathematics**

- Adds, subtracts, divides, and multiplies whole and mixed numbers, fractions, and decimals
- Uses a calculator to add, subtract, divide, multiply, whole and mixed numbers, decimals, calculate square root, percentages and ratios
- Mentally adds, subtracts, divides and multiplies whole numbers
- Understands and applies basic methods of measurement
- Calculates and evaluates precision measurements
- Measures distance using standard measurement tools
- Interprets charts, tables, and graphs

**Science**

- Uses computers for information processing
- Analyzes chemicals in society
- Applies and uses laboratory techniques safely
- Applies and uses maps, charts, tables and graphs to complete tasks
- Describes and explains chemical reactions
- Uses computers for information processing

## **Iowa Leadership, Job Getting, Job Keeping, Entrepreneurship Competencies:**

**The Iowa Family and Consumer Sciences Comprehensive Occupational Indicators/Competencies also include indicators/competencies in the following areas: leadership, job getting/job keeping and entrepreneurship. These model indicators/competencies are listed below:**

### **Leadership Indicators/Competencies:**

1. Follow directions.
2. Speak effectively in front of others.
3. Facilitate a discussion.
4. Organize an event or task.
5. Utilize time effectively.
6. Prioritize a series of tasks.
7. Define goals.
8. Work effectively with others.
9. Listen effectively.
10. Resolve conflicts.
11. Adapt to environment/situation.
12. Demonstrate effective interpersonal communication skills.
13. Demonstrate positive attitude.

### **Job Getting/Job Keeping Indicators/Competencies:**

1. Identify requirements/skills for a job.
2. Complete required forms correctly.
3. Write application letter correctly.
4. Interact with others in a courteous and tactful manner.
5. Cooperate with others.
6. Accept individual differences.
7. Respect property of others.
8. Organize thoughts and communicates clearly.
9. Exhibit dependability.
10. Demonstrate punctuality.
11. Ask for help when needed.
12. Accept new challenges.
13. Accept supervision willingly.
14. Adapt to change/demonstrates flexibility.
15. Manages time effectively.
16. Follow rules and regulations and guidelines.
17. Produce quality work.
18. Take responsibilities for mistakes and/or good work.
19. Comply with safety and health rules.
20. Utilize equipment correctly.
21. Maintain clean and orderly work area.
22. Demonstrate personal hygiene, cleanliness, and appropriate dress.
23. Accept constructive criticism.
24. Demonstrate initiative.
25. Demonstrate loyalty to employer/business.

**Entrepreneurship Indicators/Competencies:**

1. Demonstrate ethics in business.
2. Identify the personal characteristics of entrepreneurs.
3. Recognize the importance of resources for technical assistance.
4. Explain types of business ownership.
5. Identify factors in obtaining finances for a new business.



Compiled by:  
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