Introductory Lesson

Lifetime Nutrition and Wellness
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Career and Technical Education (CTE)
Career and Technical Education (CTE)

Definition #1:
Career and Technical Education (CTE) instruction aims at developing foundational skills, core workplace competencies, and specific skill competencies in various occupational areas.

Definition #2:
Career and Technical Education (CTE) prepares young people to manage the dual roles of family member and wage earner and enable students to gain entry-level employment in a high-skill, high-wage job and/or to continue their education.
Career and Technical Education (CTE)

Internships, practicum courses, career preparation courses, dual enrollment programs, and apprenticeships are a few venues that deliver career and technical education by providing meaningful opportunities for learners to apply their academic and technical skills.
Career and Technical Education

Historical Side Notes:

In the past, Career and Technical Education (CTE) was organized by program areas, but is now organized by career clusters.

Example:

Family and Consumer Sciences (program area) courses are now located in five career clusters:

• Architecture and Construction (Interior Design courses)
• Arts, AV Technology and Communication (Fashion Design courses)
• Education and Training
• Hospitality and Tourism
• Human Services
Career and Technical Education (CTE)

- You are currently enrolled in the course **Lifetime Nutrition and Wellness**
- **Lifetime Nutrition and Wellness** is a CTE course
- You are a CTE student
- I am a CTE instructor
The 16 Career Clusters™

- Agriculture, Food & Natural Resources
  - Processing, producing, distributing, and development of agricultural commodities and natural resources

- Business Management & Administration
  - Organizing, directing, and evaluating functions essential to productive business operations

- Government & Public Administration
  - Executing governmental functions at the local, state, and federal levels

- Human Services
  - Providing for families and serving human needs

- Manufacturing
  - Processing materials into intermediate or final products

- Transportation, Distribution & Logistics
  - Managing movement of people, materials, and goods by road, pipeline, air, rail, and water

- Architecture & Construction
  - Designing, managing, building, and maintaining the built environment

- Education & Training
  - Providing education and training services, and related learning support services

- Health Science
  - Providing diagnostic and therapeutic services, health information, support services, and biotechnology research

- Information Technology
  - Designing, supporting, and managing hardware, software, multimedia, and systems integration

- Marketing
  - Performing marketing activities to reach organizational objectives

- A/V Technology & Communications
  - Creating, exhibiting, performing, and publishing multimedia content

- Finance
  - Financial and investment planning, banking, insurance, and business financial management

- Tourism
  - Managing restaurants and other food services, lodging, attractions, recreation events, and travel-related services

- Public Safety, Corrections & Security
  - Providing legal, public safety, protective, and homeland security services

- Science, Technology, Engineering & Mathematics
  - Performing scientific research and professional and technical services

The career clusters icons above are used with permission of the States’ Career Clusters Initiative, 2007. For more information, visit www.careerclusters.org

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The 16 Career Clusters™

Processing, producing, distribution, and development of agricultural commodities and natural resources

Designing, managing, building, and maintaining the built environment

Creating, exhibiting, performing, and publishing multimedia content

Organizing, directing, and evaluating functions essential to productive business operations

Providing education and training services, and related learning support services

Financial and investment planning, banking, insurance, and business financial management

Executing governmental functions at the local, state, and federal levels

Providing diagnostic and therapeutic services, health information, support services, and biotechnology research

Managing restaurants and other food services, lodging, attractions, recreation events, and travel-related services

Human Services

Providing for families and serving human needs

Information Technology

Providing legal, public safety, protective, and homeland security services

Marketing

Performing marketing activities to reach organizational objectives

Manufacturing

Performing scientific research and professional and technical services

Transportation, Distribution & Logistics

Managing movement of people, materials, and goods by road, pipeline, air, rail, and water

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Lifetime Nutrition and Wellness

Providing for families and serving human needs

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Human Services

Principles of Human Services

- Dollars and Sense
- Interpersonal Studies
- Child Development
- Family & Community Services
- Introduction to Cosmetology
- Counseling & Mental Health
- Child Guidance
- Cosmetology I
- Cosmetology II
- Practicum in Human Services

Lifetime Nutrition & Wellness (may be added to any sequence)
Sequence of courses available in our district/campus
Human Services
Programs of Study

- Consumer Services
- Counseling and Mental Health Services
- Early Childhood Development & Services
- Family and Community Services
- Personal Care Services
Career and Technical Education (CTE)

Career Cluster: Human Services

Course Title: Lifetime Nutrition and Wellness

Program of Study: All five Programs of Study

Description: Providing for families and serving human needs

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Preparing individuals for employment in career pathways that relate to families and human needs.

<table>
<thead>
<tr>
<th>Sample Career Specialties / Occupations</th>
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</thead>
<tbody>
<tr>
<td>Directors, Childcare Facilities</td>
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<tr>
<td>Assistant Directors, Childcare Facilities</td>
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<tr>
<td>Elementary School Counselors</td>
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<tr>
<td>Preschool Teachers</td>
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<td>Educators for Parents</td>
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<tr>
<td>Nannies</td>
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<tr>
<td>Teachers' Assistants</td>
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<tr>
<td>Childcare Assistants/Workers</td>
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<table>
<thead>
<tr>
<th>Early Childhood Development &amp; Services</th>
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<tbody>
<tr>
<td>Counseling &amp; Mental Health Services</td>
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<tr>
<td>Family &amp; Community Services</td>
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<tr>
<td>Personal Care Services</td>
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<td>Consumer Services</td>
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<tr>
<th>Pathways</th>
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<tr>
<th>Cluster Knowledge and Skills</th>
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<tbody>
<tr>
<td>Academic Foundations</td>
</tr>
<tr>
<td>Communications</td>
</tr>
<tr>
<td>Problem Solving and Critical Thinking</td>
</tr>
<tr>
<td>Information Technology Applications</td>
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<tr>
<td>Systems</td>
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<tr>
<td>Safety, Health and Environmental</td>
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<td>Leadership and Teamwork</td>
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<tr>
<td>Ethics and Legal Responsibilities</td>
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<tr>
<td>Employability and Career Development</td>
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<td>Technical Skills</td>
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2008-2009
Possible Program of Study
Dietitian and Nutritionist
## Family & Community Services

**Cluster Overview:** Preparing individuals for employment in career pathways that relate to families and human needs.

**Career Goal (O*NET Code):** Dietitian and Nutritionist (29-1031), Dietetic Technician (29-2051).

### Suggested Coursework

<table>
<thead>
<tr>
<th>Middle School</th>
<th>8th</th>
<th>HS Courses:</th>
<th>Core Courses:</th>
<th>Career-Related Electives:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Courses:</td>
<td>English I</td>
<td>World Geography</td>
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<tr>
<td>Core Courses:</td>
<td>Algebra I</td>
<td>Languages other than English I</td>
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<tr>
<td>Core Courses:</td>
<td>Biology</td>
<td>Physical Education</td>
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<tr>
<td>Career-Related Electives:</td>
<td>Principles of Human Services</td>
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<thead>
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<th>High School</th>
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<th>Core Courses:</th>
<th>Core Courses:</th>
<th>Career-Related Electives:</th>
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<tbody>
<tr>
<td>Core Courses:</td>
<td>English II</td>
<td>World History</td>
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<tr>
<td>Core Courses:</td>
<td>Geometry</td>
<td>Languages other than English II</td>
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<tr>
<td>Core Courses:</td>
<td>Chemistry</td>
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<tr>
<td>Career-Related Electives:</td>
<td>Interpersonal Studies or Child Development or Family and Community Services or Medical Terminology</td>
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<thead>
<tr>
<th>High School</th>
<th>10th</th>
<th>Core Courses:</th>
<th>Core Courses:</th>
<th>Career-Related Electives:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Courses:</td>
<td>English III</td>
<td>United States History</td>
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<tr>
<td>Core Courses:</td>
<td>Algebra II</td>
<td>Professional Communications</td>
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<tr>
<td>Core Courses:</td>
<td>Physics</td>
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<tr>
<td>Career-Related Electives:</td>
<td>Lifetime Nutrition and Wellness or Scientific Research and Design or Languages other than English III</td>
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<thead>
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<th>Core Courses:</th>
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<th>Career-Related Electives:</th>
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<tbody>
<tr>
<td>Core Courses:</td>
<td>English IV</td>
<td>Government/Economics</td>
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<tr>
<td>Core Courses:</td>
<td>Precalculus</td>
<td>Fine Arts</td>
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<tr>
<td>Core Courses:</td>
<td>AP Biology</td>
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<tr>
<td>Career-Related Electives:</td>
<td>Food Science or World Health Research or Problems and Solutions or Languages other than English IV</td>
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<table>
<thead>
<tr>
<th>High School</th>
<th>12th</th>
<th>Core Courses:</th>
<th>Core Courses:</th>
<th>Career-Related Electives:</th>
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<tbody>
<tr>
<td>Core Courses:</td>
<td>English IV</td>
<td>Government/Economics</td>
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<td>Core Courses:</td>
<td>Precalculus</td>
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<tr>
<td>Core Courses:</td>
<td>AP Biology</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Career-Related Electives:</td>
<td>Food Science or World Health Research or Problems and Solutions or Languages other than English IV</td>
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</tbody>
</table>

**Curricular Experiences:**
- Family, Career and Community Leaders of America
- Health Occupations Students of America
- NASA Research Program
- STARS Research Program

**Extracurricular Experiences:**
- Language Immersion Programs
- 4-H Youth Development
- Science Clubs
- School Newspaper
- Student Government
- UIL Academic Competitions
- Yearbook

**Career Learning Experiences:**
- Career Preparation
- Internship
- Job Shadowing

**Service Learning Experiences:**
- Boy Scouts of America
- Campus Service Organizations
- Community Service Volunteer
- Girl Scouts of the USA
- Medical Mission Trips

**College Credit Opportunities -- High School**

<table>
<thead>
<tr>
<th>12th</th>
<th>Core Courses:</th>
<th>Career Options:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Courses:</td>
<td>English IV</td>
<td>Registered Dietitian</td>
</tr>
<tr>
<td>Core Courses:</td>
<td>Precalculus</td>
<td>Nutrition Consultant</td>
</tr>
<tr>
<td>Core Courses:</td>
<td>AP Biology</td>
<td>Nutrition Educator</td>
</tr>
</tbody>
</table>

**Students should take Advanced Placement (AP), International Baccalaureate (IB), dual credit, Advanced Technical Credit (ATC), or locally articulated courses (Tech Prep), if possible. List those courses that count for college credit on your campus.**

**Career Options:**
- Dietary Aide
- Food Service Worker
- Dietetic Technician-Registered
- Certified Dietary Manager
- Dietetics
- Foods and Nutrition
- Nutrition
- Foods and Nutrition Studies

**Professional Associat**
- Texas Association of Human Services
- American Association of Family & Consumer Sciences
- American Diabetes Association
- American Dietetic Association
- Institute of Food Technologists
- Society for Nutrition Education
- Texas Dietetic Association

**Career Options:**
- Nutrition Consultant
- Nutrition Educator
- Nutrition Researcher
- Nutrition Manager
- Food Service Manager
- Registered Dietitian
- Food Service Worker

**Students may select other elective courses for personal enrichment purposes.**

This plan of study serves as a guide, along with other career planning materials, for pursuing a career path. Information as of 2009. All plans meet high school graduation requirements as well as college entrance requirements.
Sample Bachelor Degrees

- Dietetics
- Foods and Nutrition
- Nutrition
- Family & Consumer Sciences
Graduate Degrees

- Foods and Nutrition
- Food Science
- Nutrition
- Nutrition Science
Sample Career Options

- Food Service Manager
- Nutrition Consultant
- Nutrition Educator
- Nutritionist
- Registered Dietitian
TEXAS ESSENTIAL KNOWLEDGE AND SKILLS (TEKS)

Lifetime Nutrition and Wellness
(3) The student identifies the importance of a well-written business plan. The student is expected to:

- (A) categorize a business plan and the need for a well-orchestrated business plan;
- (B) research business plan outlines, resources, and templates using web search engines;
- (C) explain a marketing plan, including price competition, non-price competition, market analysis, competition, marketing research, market segmentation, demographics, and sales forecasting;
(1) The student understands the role of nutrients in the body. The student is expected to:
(A) classify nutrients, their functions, and food sources and compare the nutritive value of various foods;
(B) assess the effects of nutritional intake on health, appearance, effective job performance, and personal life;
(C) analyze and apply various dietary guidelines throughout the life cycle, including pregnancy, infancy, childhood, and late adulthood; and
(D) compare personal food intake to recommended dietary guidelines.
TEXAS ESSENTIAL KNOWLEDGE AND SKILLS (TEKS)  
Lifetime Nutrition and Wellness

(2) The student understands the principles of digestion and metabolism. The student is expected to:
(A) describe the processes of digestion and metabolism;
(B) calculate and explain basal and activity metabolisms and factors that affect each;
(C) apply knowledge of digestion and metabolism when making decisions related to food intake and physical fitness;
(D) locate community resources that promote physical activity and fitness; and
(E) explain the relationship of activity levels and caloric intake to health and wellness, including weight management.
TEXAS ESSENTIAL KNOWLEDGE AND SKILLS (TEKS)
Lifetime Nutrition and Wellness

(3) The student demonstrates knowledge of nutritionally balanced diets. The student is expected to:

(A) research the long-term effects of food choices;
(B) outline strategies for prevention, treatment, and management of diet-related diseases such as diabetes, hypertension, childhood obesity, anorexia, and bulimia;
(C) determine the effects of food allergies and intolerances on individual and family health;
(D) plan diets based on life cycle, activity level, nutritional needs, portion control, and food budget;
(E) develop examples of therapeutic diets;
(F) analyze advertising claims and fad diets with the recommendations of the Recommended Dietary Allowances;
(G) analyze current lifestyle habits that may increase health risks;
(H) identify community programs that provide nutrition and wellness services;
(I) examine the nutritional value of fast foods and convenience foods;
(J) read and interpret food labels; and
(K) examine and explain nutritional serving sizes.
(4) The student understands safety and sanitation. The student is expected to:
(A) demonstrate safe and sanitary practices in the use, care, and storage of food and equipment;
(B) explain types and prevention of food-borne illnesses; and
(C) practice appropriate dress and personal hygiene in food preparation.
(5) The student demonstrates knowledge of food management principles. The student is expected to:
(A) read and comprehend standard recipes;
(B) correctly use standard measuring techniques and equipment;
(C) demonstrate correct food preparation techniques, including nutrient retention;
(D) use food buying strategies such as calculating food costs, planning food budgets, and creating grocery lists;
(E) demonstrate food preparation techniques to reduce overall fat and calories;
(F) practice etiquette, food presentation, and table service appropriate for specific situations; and
(G) apply food storage principles.
The student demonstrates effective work habits. The student is expected to:

(A) participate as an effective team member demonstrating cooperation and responsibility;
(B) apply effective practices for managing time and energy to complete tasks on time; and
(C) practice problem solving using leadership and teamwork skills.
(7) The student investigates careers in nutrition. The student is expected to:
(A) compare and contrast education or training needed for careers in nutrition;
(B) establish personal short-term and long-term career goals; and
(C) analyze entrepreneurial opportunities in nutrition.
End of Course Project Options - Lifetime Nutrition and Wellness
Overview of Lifetime Nutrition and Wellness
Career Cluster

Course Title

Lifetime Nutrition and Wellness

Program of Study

All five Programs of Study

Description

Providing for families and serving human needs
Websites:

- AchieveTexas
  A college and career initiative designed to help students (and their parents) make wise education choices. It is based on the belief that the curricula of the 21st century should combine rigorous academics and relevant career education.
  
  [http://www.achievetexas.org/in](http://www.achievetexas.org/in)

- Learning that Works for America CTE™
  Sponsored by The National Association of State Directors of Career Technical Education Consortium (NASDCTEc). Aims to support an innovative CTE system that prepares individuals to succeed in education and their careers.
  
  [http://www.careertech.org](http://www.careertech.org)

- Texas Education Agency
  Texas Essential Knowledge and Skills. The mission of the Texas Education Agency is to provide leadership, guidance and resources to help schools meet the educational needs of all students.
  