

***Nutrition Across the Lifespan**

***2025-2026 Syllabus**

Part 1: Course Information

Instructor Information

Instructor: Ashley Dudley

School Telephone: 423-623-8718 ext. 114

E-mail: dudleya@cocke.k12.tn.us

Prerequisite

- Intro to Human Studies

Textbook & Course Materials

Required Text

- Guide to Good Food, 13th Edition, Largen Bence, ISBN-978-1-61960-629-6

Recommended Texts & Other Readings or Resources

- Other readings will be provided as the semester progresses.

Course Requirements

- A gmail/google account will be required to submit class assignments.

Course Structure

Nutrition Across the Lifespan is a combination of lecture, individual, group, and lab activities. The course is very interactive and allows students to complete many hands-on activities to provide an effective, beneficial learning environment.

Part 2: Student Learning Outcomes

1. Safety & Sanitation

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

2. Nutrition and Health Overview

- 2.1 Dietary Guidelines for Americans: Summarize the Dietary Guidelines for Americans and its relationship to optimum physical, mental, and social well-being at all stages of development across the life span as outlined by the USDA and HHS. Illustrating findings on the nutritional needs of individuals and families in relation to age, gender, activity level, and health status.

3. Anatomy and Physiology of Nutrition

- 3.1 Anatomy and Physiology of the Gastrointestinal System: Create a model or graphic illustration that identifies the major anatomic structures and accessory organs of the gastrointestinal (GI) system. Explain the function of each structure, including the accessory organs, in the process of digestion, absorption, transport of nutrients in the body including the conversion of glucose to ATP. Also describe common gastrointestinal complications and digestive diseases, including how the body deals with deficiencies and excess nutrients and the impact on overall health
- 3.2 Macronutrients, Micronutrients, and Water: Identify, analyze, and visually represent the macronutrients , micronutrients, and water required in the human diet. Include the common food sources of those nutrients, their chemical properties, and function in the body, as well as the influence upon biological systems in reference to maintenance and growth. a. Macronutrients include carbohydrates, lipids, proteins b. Micronutrients include minerals, vitamins c. Water

4. Nutritional Requirements Across the Lifespan

- 4.1 USDA Guidance: Accurately read, interpret, and communicate understanding of guidance from the U.S. Food and Drug Administration (FDA), such as nutrition labels and daily value recommendations using accurate symbols, key terms, and other domain-specific words and phrases. a. Accurately read and interpret nutrition labels using correct symbols and terminology. b. Analyze nutrition labels in correlation to specific dietary needs.
- 4.2 Life Span Nutritional Guidelines: Research and prepare informational artifacts for consumers that present the specific nutritional guidelines for each stage of the life

span using scientifically accurate terms and symbols. For each life span phase, include the following: a. How nutritional needs change throughout the lifespan. b. Factors that impact food choices at various stages of the lifespan. c. Common nutritional excesses and deficiencies at various stages of the lifespan. d. Importance of fitness and exercise during each stage of the lifespan. e. Plan meals for each stage of the lifespan.

- 4.3 Meal Planning: Analyze various meal plans that meet the 2020-2025 Dietary Guidelines for Americans recommended by the U.S. Department of Agriculture. Create a meal plan that addresses the nutritional needs of a specific individual based on their age, gender, activity level, and other factors and justify choices using evidence. Select, prepare, and serve food(s) from the meal plan following recipes precisely, including defining and utilizing specific culinary and measurement terms as needed. Practice proper serving and etiquette principles during appropriate situations.
- 4.4 Food Journal Analysis: Keep a food journal. Analyze the nutrient content of food consumed using a nutrient analysis program based on age, gender, activity level, and health status. Summarize the findings and include conclusions drawn on recommendations of how the diet could be modified to more closely align with the current edition of the Dietary Guidelines for Americans.
- 4.5 Alternative Diet and Lifestyle Approaches: Compare and contrast alternative diet and lifestyle approaches to the Dietary Guidelines for Americans for individuals of the same age and gender. Explain the reasons for the dietary differences summarizing information to describe the physiological differences of the lifestyles, including, but not limited to: a. Differences in physical activity (e.g., athletic training) b. Differences in religious or ethical values (e.g., vegetarian, vegan, kosher) c. Differences based on disease or physiological need (e.g., gluten free and low sodium diets) d. Common diet related diseases such as diabetes and/or cardiovascular disease.
5. Food Preferences and Choices
- 5.1 Food Choices and Preferences: Research and summarize the factors that contribute to food choices and preferences, including cultural, geographical, economic, psychological, and social influences. Describe the most likely results of preferences and external factors on nutritional intake. a. Example of geographical external factor on nutritional needs: Individual living in an area without adequate sunlight exposure may need to eat a diet rich in Vitamin D to make up for vitamin deficiency. b. Example of geographical preference on food choice: Individual living in a colder climate might prefer methods of cooking that keep heat in the living area, while an individual living in a warmer climate might prefer preparation methods that reduce heat.
- 5.2 Food Choices Related to the Senses and Preparation Techniques: Form a hypothesis and design and conduct an experiment to identify the role of the senses and/or food preparation techniques in food choices. Summarize and defend results.
- 5.3 Nutritional Claims of Various Diets: Research nutritional claims of various diets and

use appropriate/reliable sources of nutritional information to determine the validity of those claims. Use nutritional databases, food label information, and other sources to analyze the nutrient composition of one day of foods on each diet investigated. Compare and contrast two plans for an individual with specific characteristics, noting similarities and differences in two diets.

6. Nutritional Issues and Controversies

- 6.1 Topics in Nutrition: Synthesize evidence from multiple sources to analyze topics in nutrition, including but not limited to: a. Genetically modified foods b. Artificial sweeteners versus natural sugar c. Organic and local food movements d. Benefits and risk of different forms of dieting e. Use of probiotics Evaluate the validity and credibility of source materials and deduce the principle arguments for each, carefully weighing the author's evidence against potential biases.
- 6.2 Obesity in America: Describe the correlation of energy balance, lifestyle, diet, age, gender, and metabolism to the obesity epidemic in America. Compare and contrast how different diets, habits, heredity, and physical characteristics contribute to obesity. Analyze the government's role in the food supply and research various initiatives to fight obesity and improve nutrition across the nation including government assistance programs.

7. Food Preparation and Integrity

- 7.1 Food Supply: Investigate the food supply chain from point of origin to the point of sale – analyzing handling, transportation, storage, processing, and packaging – to identify where food safety and nutritional value could be compromised. Determine where food is most susceptible to contamination, food-borne illness, spoilage, and nutrient loss.
- 7.2 Selection and Preparation of Food: Demonstrate food selection and preparation methods that maximize the nutritional value of foods while minimizing dietary health risks. Plan and conduct nutrition laboratory experiments to determine the physical and chemical changes of food structure through chemical reactions then compare and contrast the results. Demonstrate relationships among concepts including, but not limited to: a. Heat b. Acidity level c. Fermentation d. Maillard reactions e. Chemically processed foods f. Preparation techniques and product yield

8. Socioecological Nutrition

- 8.1 Government Nutrition Programs: Analyze the roles and responsibilities of the USDA, FNS, DHS, FDA in relation to food and nutrition. Research various government programs that aim to improve the nutrition of low-income families.
- 8.2 Healthy Living Strategies: Describe strategies that can be implemented at a workplace or in the community to promote the consumption of healthy foods and beverages.

- Students will complete seatwork as assigned.

- Students will participate in lab assignments as assigned.
- Students will make a 100 percent on safety tests given.

Part 3: Grading Policy

Late Work Policy

Work is due by assigned date given by instructor. Student work missed due to absences will be submitting within 3 days of days missed. Teacher discretion will be used with variations to this rule.

Viewing Grades in ASPEN (optional)

Points you receive for graded activities will be posted to the ASPEN Grade Book. Click on the My Grades link on the left navigation to view your points.

Grades will be posted to Aspen on a weekly basis.

Letter Grade Assignment

Final grades assigned for this course will be based on the percentage of total points earned and are assigned as follows:

This can be modified, but must match the district scale.

Letter Grade	Percentage	Performance
A	90-100%	Excellent Work
B	80-89%	Good Work
C	70-79%	Average Work
D	60-69%	Poor Work
F	0-59%	Failing Work

Important note: For more information about grading at Channel Islands, visit the academic policies and grading section of the university catalog

Part 4: Course Policies

Attend Class

Students are expected to attend all class sessions as listed on the course calendar.

- Attendance and participation in all classwork will impact grade.

Participate

Participation is required in seatwork, group work, and lab work for this course.

Build Rapport

If you find that you have any trouble keeping up with assignments or other aspects of the course, make sure you let your instructor know as early as possible. As you will find, building rapport and effective relationships are key to becoming an effective professional. Make sure that you are proactive in informing your instructor when difficulties arise during the semester so that they can help you find a solution.

Complete Assignments

Assignments must be submitted by the given deadline or special permission must be requested from instructor *before the due date*. Extensions will not be given beyond the next assignment except under extreme circumstances.

All discussion assignments must be completed by the assignment due date and time. Late or missing discussion assignments will effect the student's grade.

Incomplete Policy

Under emergency/special circumstances, students may petition for an incomplete grade. An incomplete will only be assigned if the teacher deems it necessary. All incomplete course assignments must be completed within time frame determined by teacher.

Academic Dishonesty Policy

Cheating and dishonesty of any type will not be tolerated. A zero will be given if a student is caught cheating. Administrator involvement will occur if necessary. Student is expected to do his or her own work at all times throughout this class.

Student Testing Code of Ethics and Security

It is important for you as a student to know that the following guidelines are to be strictly followed. This year the TNReady EOC test will count at least 15% of your final semester grade. Your work on this test is very important and it deserves your best effort.

I understand that during testing on the days of the assessment, I am responsible for:

- Not having any electronic devices on me or in my purse/backpack/pockets
 - Including but not limited to cell phones, smart phones, smart watches, etc. **during testing or during breaks.**
 - Best practice is for students to leave devices at home or in their lockers on the day of testing.
 - If I am caught with a device during testing or during breaks, my test may be nullified, resulting in a zero as at least 15% of my semester grade, and any school level disciplinary action as deemed appropriate by the administration.
- Trying my best on the test
 - If I do not attempt to test (I give **no answers or randomly answer** questions) my test score may be nullified, resulting in a zero as at least 15% of my semester grade, and any school level disciplinary action as deemed appropriate by the administration.
 - The testing administrators and proctors in the testing environment will determine if no answers or random answering is taking place.
 - I will focus and put forth effort on the test .
- Being honest and not cheating
 - If I am caught cheating (taking pictures of the test, writing down and passing answers, talking to other students, looking on other computers, using software outside the testing platform), my test may be nullified, resulting in a zero as at least 15% of my semester grade, and any school level disciplinary action as deemed appropriate by the administration.

Important Note: Any form of academic dishonesty, including cheating and plagiarism, may be reported to the office of student affairs.

Course policies are subject to change. It is the student's responsibility to check for corrections or updates to the syllabus. Any changes will be posted in the classroom.