

**MT. DIABLO UNIFIED SCHOOL DISTRICT  
COURSE OF STUDY**

**COURSE TITLE:** Foods & Nutrition  
**COURSE NUMBER:** 008340  
**CBEDS NUMBER:** 8020  
**DEPARTMENT:** CTE  
**LENGTH OF COURSE:** 1 year or 1 semester double blocked  
**CREDITS PER SEMESTER:** 5  
**GRADE LEVEL(S):** 11 or 12th grade  
**REQUIRED OR ELECTIVE:** Elective

**PREREQUISITES:**

**Required - none**

**Recommended - English and Math I**

**BOARD OF EDUCATION ADOPTION: (Date of Action Meeting)**

**COURSE DESCRIPTION:** This course is designed for students to deepen their understanding of food and nutrition as it relates to their health and the foodservice & hospitality industry. Students use equipment, supplies, products and procedures in an interdisciplinary approach. Safety and sanitation is paramount and applied in a kitchen laboratory setting. Students develop laboratory writing and reasoning skills through accurate planning, record keeping, measuring and use of culinary techniques. Students will learn the role nutrition plays in their own health and the importance it plays in meal planning & food preparation. Attention will be given to the selection and preparation of food, including how to incorporate proper nutrition into their dishes by preserving nutrients, flavors, textures, and colors. Additionally, students are introduced to recipe writing and conversions as well as food costing & how to follow the healthy plate model. Throughout the course, students will be learning sustainable practices in the kitchen, such as composting and recycling as a way to reduce food waste. Students will also learn proper food etiquette as well as food customs & preparation techniques from cultures around the world. Technology will be utilized in presentations (google slides), research projects, career and college exploration, menu planning and diet analysis, and various other projects.

This course meets the Career Technical Education standards within the Foodservice and Hospitality Sector as well as Nutrition Education standards established by the California Department of Education. Students also meet graduate profile standards set by the Mt. Diablo Unified School District

**COURSE PURPOSE:** The purpose of this course is to provide students with skills and experiences in nutrition and meal production, including how to create healthy meals from scratch. They will understand food safety and sanitation requirements in a kitchen facility and the importance of proper handling of food. Students will gain valuable interpersonal skills, such as how to collaborate and work as a team, as well as time management and attention to detail in their work. By the end of this course students will be prepared for careers in healthy food service, nutrition, and the production of food, from seed to fork. In addition, students will be exposed to 21st century trends in foodservice towards food waste reduction (composting & recycling) and growing/using locally produced foods.

## **COURSE OUTLINE:**

### **Unit One: Food Safety & Sanitation**

Students will identify organisms that cause food spoilage, contamination, and conditions for growth. They will identify common types of food borne illnesses and translate the information into a chart. Students will learn to employ sanitary practices before, during, and after food preparation and service through the course. Students will learn to select proper techniques for storage and preparation of food. Students will complete the California Food Handler's training online and receive a Food Handler's certificate before going into the kitchen.

In the kitchen, students will practice and demonstrate they understand the basics of food safety & sanitation, including knife skills and proper setup and cleanup of their stations.

### **Unit Two: Kitchen Setup & Equipment**

Students will utilize critical thinking to obtain ingredients & equipment. They will learn key cooking and kitchen terms, etiquette, and sustainable practices in the kitchen work environment. Attention will be paid to waste management practices, including composting and recycling, during kitchen labs. Weekly kitchen lab report forms will be filled out as well as peer and teacher observations of students to assess proper use, care and storage of equipment. Students will also be introduced to the Tower Gardens and growing food on-campus for use in the kitchen.

### **Unit Three: Healthy Food Preparation Labs**

Students will build upon their knowledge of healthy food preparation through hands-on labs in the kitchen. They will work in teams and learn to collaborate, delegate tasks & complete recipes in a timely manner. They will practice proper use of kitchen equipment and proper measurement of ingredients, utilizing math skills scaling recipes as needed. Reading recipes thoroughly & practicing time management will be key to student success in the kitchen. Specific culinary skills will include: knife skills, raw produce preparation, making dressings, sauces & stocks, baking, roasting, sauteing, and steaming as well as food preservation methods such as dehydrating and pickling. Students will be able to describe the properties and functions of ingredients used to prepare food products and utilize scientific techniques that preserve nutrients and enhance food flavor and appearance and describe physical and chemical processes that occur during food production. By the end of this course, students will be able to prepare a complete meal that follows the healthy plate model, utilizing various advanced food preparation techniques and recipes.

### **Unit Four: Personal Nutrition and Health**

In this unit, students will gain an understanding of the role nutrients play in the body as well as in the food they eat. They will learn the basic concepts of digestion, nutrition, and assimilation of nutrients from the foods they are preparing. The main focus will be on the a deeper understanding of the 6 essential nutrients, Label Reading 101, and designing healthy meals using the USDA MyPlate model. Students will investigate and report on the role of nutrients in the body, including toxicity, deficiencies, sources, and functions. Students will engage in

practical research & determine what information is science-based and comes from reputable sources. Time will be spent on understanding eating disorders and the role emotions play in our food habits. By the end of this unit students will have the knowledge and tools to make healthier choices both at home and school, which will lead to improved health and overall wellness for themselves and their families.

#### **Unit Five: Meal Management & Sustainable Food Production**

Taking the knowledge they gained from Unit 4, students will now apply this information to creating meals and menus that reflect these important nutrition principles. Students will identify ways to manage time, energy and resources when planning and preparing meals. They will understand the problem with our fast food world, where nutrition is overlooked in the name of convenience and flavor. By getting back to scratch cooking, students can make delicious meals that are good for the body and pleasing to the palate. In the kitchen, students will learn about composting, recycling & reducing food waste as they learn about sustainability as it relates to food. Students will compare local food outlets for marketing strategies, unit pricing and product placement and how to be smart consumer. Students will cost out recipes, do conversions of recipes that are scaled for large production needs and create a menu on a budget. In addition, students will analyze a full meal for its nutritional value using an online nutrition analysis tool.

#### **Unit Six: Food Culture & Etiquette - Globally Inspired Cuisine**

Threaded throughout the entire course, students will be introduced to the influence of cuisines across the globe on modern day menus. Students will learn about the customs of different cultures and they influenced the flavors and ingredients used. Then students will get to experiment with the spices and techniques used in the kitchen that make each of these cuisines unique.

#### **Unit Seven: Career Paths, Field Trips & Junior Portfolio**

The last unit will also be threaded throughout the course, providing students hands-on experience and opportunities to understand the career paths within Nutrition, Wellness, and Sustainable Hospitality. We broaden our focus to include the production of food & sustainability practices, as these are both growing trends in the food & hospitality industry. Key partnerships are developed with local businesses and organizations to support our program, guest speak to students and provide insight into careers after graduation.

#### **Unit 8: Leadership, Communication & Teamwork**

In this final unit, which is threaded throughout the entire course, students will demonstrate the characteristics of teamwork, leadership and citizenship in the school, community and workplace settings. Students will work both individually and in teams for effective performance and attainment of their goals. In addition, students will learn how to apply multiple approaches to conflict resolution in a variety of situations. They will also demonstrate how to interact with others in ways that show respect for the individual and cultural differences as well as attitudes and feelings of others.

## KEY ASSIGNMENTS:

**Comment [1]:** Add reading assignments based on Nutrition & Wellness for Life

### Unit One: Food Safety & Sanitation

**Sample Assignment 1:** Students will work in pairs to research a food borne illness and create a google slide presentation with the following: cause, symptoms, how it can be prevented, & pictures of the organism or bacteria. Also included in the research will be finding an article related to this food borne illness.

**Sample Assignment 2:** Students will go through the online course and then pass the Food Handler's test (they must pass this each year)

**Kitchen Assignment:** Students will be given a sample scenario and show how they would use proper safety & sanitation practices. Example: Handling raw chicken; chopping vegetables (knife skills); Demonstration & practice of kitchen rules & proper kitchen attire.

### Unit Two: Kitchen Setup & Equipment

**Sample Assignment 1:** Students will work in groups and rotate through the kitchen stations, setting up and identifying each piece of equipment and it's purpose. A written test will demonstrate their understanding of key kitchen terms and proper use of equipment.

**Sample Assignment 2:** Food Waste - To create a sustainable kitchen that reduces food waste, students will setup the recycling and composting bins in the kitchen and practice sorting kitchen waste into the appropriate bins. In addition, students will watch the short film "The Food Waste Project" and write a reflection paper on how they can be a part of the solution.

**Comment [2]:** <https://foodwasteproject.wordpress.com/>

\*At the end of each unit, students will write a one page reflection paper to showcase the knowledge they have gained based on a discussion prompt.

### Unit Three: Food Preparation - Kitchen Labs

**Sample Assignment 1:** Students will do a research project on the preservation methods of foods. Each group will pick one method, such as pickling or drying, explaining the process of preservation and the chemical changes it has on the food. In addition, students will demonstrate this method in the kitchen, following a recipe and showcasing the resulting product to the class as well as through a kitchen lab report.

**Comment [3]:** <http://www.alive.com/health/the-science-of-food-preservation/>

**Sample Assignment 2:** As part of their semester project, students will research and select an appropriate recipe, prepare a kitchen lab plan sheet, ingredient list order, equipment and supply list and time management schedule. Students will demonstrate proper measurements and equipment use as well as be able to explain the food preparation techniques and skills used to create their recipe.

\*At the end of each unit, students will write a one page reflection paper to showcase the knowledge they have gained based on a discussion prompt.

#### **Unit Four: Personal Nutrition, Health, and Wellbeing**

##### **Sample Assignment 1: The 6 Essential Nutrients**

Each student is asked to create a presentation based on the information we learned in class about acid and alkaline foods. They will use the Slides software in their Google Classroom, upload the presentation and present to class on Friday. The first slide will be the Name of presentation, their name, and a picture of the PH scale. The second slide will be a list of, at least, 3-4 different acidic foods with corresponding pictures and Ph levels. The third slide will be consist of at least 3-4 alkaline foods with corresponding pictures and Ph levels. The fourth slide will be an interesting fact about water that they learned this week with relevant picture.

**Sample Assignment 2:** Research and report on the role of a specific vitamin or mineral used in the body, including toxicity, deficiency, sources and functions. Present using google slides, creating a visually pleasing presentation with at least five slides (Introduction Slide, Overview of Vitamin or Mineral, Toxicity/Deficiency information, Sources & Function). All sources will be sited at the end of their presentation.

##### **Sample Assessment Method for Presentations:**

A rubric will be used to grade the students on their presentations to the class. They will be graded on completion of all assigned aspects as well as their presentation skills, such as eye contact and clear verbal explanation of material.

\*At the end of each unit, students will write a one page reflection paper to showcase the knowledge they have gained based on a discussion prompt

Films: Forks Over Knives; In Defense of Food, Supersize Me

#### **Unit Five: Meal Management & Sustainable Food Production**

**Sample Assignment 1:** Using adds from local supermarkets, students will be challenged to create a complete meal for a family of four for \$10. They must include a recipe and cost analysis of their meal as well as a reflection paper on their experience.

**Sample Assignment 2:** Students will demonstrate menu planning skills by a full menu with a specific theme, do a nutrient analysis of their menu, provide information about key ingredients they used, how much the meal cost and as part of their final, cook and present their meal to their chosen guest (teachers and/or administrators)

**Comment [4]:** Films: Lunch Line  
<http://lunchlinefilm.com/>; FedUp  
<http://fedupmovie.com/>

\*At the end of each unit, students will write a one page reflection paper to showcase the knowledge they have gained based on a discussion prompt.

#### **Unit Six: Food Culture & Etiquette - Creating Glocally Inspired Cuisine**

**Sample Assignment 1:** Students will be given a country or region and tasked to write a research paper that includes the food traditions and customs of their region, nutritional highlights and norms, as well as picking a prominent dish that represents their culture. This assignment will include providing a recipe with the key ingredients and why they are used. A sample of the dish can be made to sample to the class.

**Sample Assignment 2:** Students will prepare and evaluate traditional recipes from regions of the US and international regions of the world. They will fill out an evaluation form for each recipe based on taste, appearance, ingredients used & preparation methods.

\*At the end of each unit, students will write a one page reflection paper to showcase the knowledge they have gained based on a discussion prompt.

#### **Unit Seven: Career Paths, Field Trips & Junior Portfolio**

**Sample Assignment 1:** Students will create a resume for a job of their choice. In preparation for writing their resume, students will take a career personality test, do research on the education requirements of their job choice, key responsibilities, salary, expectations and work environment. Included in their assignment will be a sample job posting.

**Sample Assignment 2:** Guest Speakers - For each guest speaker that comes in, students will write an analysis of the skills needed to work in the position of the guest speaker or other positions within their company/organization. Students must describe the behaviors and attitudes that contribute to the guest speakers success in job retention and promotion.

#### **Unit 8: Leadership, Communication & Teamwork**

**Sample Assignment 1:** Students will partake in peer, self and teacher evaluations to understand their strengths and weaknesses related to teamwork skills.

**Sample Assignment 2:** Students will work in groups when doing various projects as well as in the kitchen during food labs. Students will use their problem solving skills when facing group conflict. In addition, each student will rotate through a leadership role in the kitchen, giving them the opportunity to practice management skills and working as a team effectively, drawing on everyone's strengths to get the work or project done.

**INSTRUCTIONS METHODS and/or STRATEGIES:**

Teacher-guided lecture and presentation. Project-based group assignments. Project reports. Teacher demonstrations. Student teaching student and partner share. Google Classroom. SLIDES presentations. Worksheets from Textbook. YouTube videos with study guide. Documentary movies with study guide. Community resources such as field trips and guest speakers. Reflection papers. Daily vocabulary and food logs. Weekly leading questions. Hands-on food preparation, meal acquisition, and equipment management in Commercial and Home Economics Kitchen.

**ASSESSMENTS INCLUDING METHODS and/or TOOLS**

Tests and quizzes. Classroom participation, effort, skill, and quality of work. Completion of assignments. Individual and group projects. Rubrics to measure presentations. Unit reflection papers. Punctuality and attendance.

**INSTRUCTIONAL MATERIALS:**

**Textbook:**

West, D. (2012). Nutrition & Wellness for Life (4th Ed.) Tinley Park, Illinois. The Goodheart-Willcox Company, Inc.

**Guide to Good Food**

**Books:**

Lustig, R. (2015). Fat Chance.

Lustig, R. & Gershen, C. The Fat Chance Cookbook

**Documentaries:**

Pollan, M. (2015). In Defense of Food.

Lustig, R. (2015). Sweet Revenge.

**Sequence of Courses:**

Foods 1 - Sophomore

Foods & Nutrition - Junior

Nutrition 115: Nutrition & Health Practical Applications (DVC course) - Senior

**Committee Members:**

- 1. **Rose Stein, MDUSD CTE Teacher**
- 2. **Cindy Gershen, MDUSD CTE Teacher**
- 3. **Kristine Zelhart, Nutrition Consultant**

- 4. **Mary Buckley, IHTA Lead Teacher**
- 5. **Liane Cismowski, MDHS Principal**
- 6. **Heather Fontanilla, Administrator, Career Pathways & Linked Learning**

**Comment [5]:** <http://www.g-wlearning.com/foodsandnutrition/9781619606296/student/index.htm>