

# Foundations of Nutrition

## **Course Description**

*This course is an introduction to the science of nutrition and the relationship of food intake and health. Nutrient requirements and food selection to meet those requirements are discussed. Students evaluate their own food intake, eating behaviors; learn to be informed consumers of food and nutritional information in our modern environment. Provide students with critical human life and nutrition information that will expand their understanding of science and also be personally applicable to their daily and life-long health and wellbeing in the modern environment.*

## **Priority Standards / CTE Strands**

- Understand the foundations of how to fuel and nourish the body optimally using the guidelines and standards based on the discipline of fundamental scientific principles of nutrition and levels of organization in nature. Compare the six categories of nutrients that function in cellular structure and metabolism that are essential to life due to human genetics.
- Communicate the evolution from the Paleolithic diets to today's diet in the content of dietary recommendations for Americans. analyze, manage, and evaluate diets. Utilize tools to determine nutrient values of foods consumed by diverse populations. Integrate the scientific knowledge of nutrition, genetics, chemistry, metabolism, exercise and lifestyle while utilizing several standards/guidelines/guidance systems to.
- Associate nutrition, genetics, metabolism, exercise and lifestyle with health promotion and disease prevention. Identify risk factors for developing chronic disease and understand how to manage the intake of energy to prevent the development of nutrition-related chronic disease. Identify how humans obtain and use energy, how the human body processes food and utilizes nutrients, and essential nutrients for humans and their specific roles. Explain how these maintain or disrupt homeostasis through sustained or altered metabolisms affected by their cumulative dietary food choices and lifestyle with additional reference to energy balance and weight control.
- Investigate energy balance, physical activity, and weight control to prevent obesity and achieve nutritional adequacy. Identify scientific methods used; discern the reliability of nutrition information based on scientific evidence, source and professional credentials. Relate the knowledge across several different scientific disciplines.
- Understand the appropriate intake of vitamins and minerals to regulate metabolism and maintain health. Provide examples of shared genetic processes in regards to essential nutrients, function, health, and disease.
- Recognize scientifically based nutrition information and to understand the food industry, food safety, food processing, food production, federal agencies and their responsibilities to insure public food safety, sustainable food production; and personal food handling skills to avoid food borne illness from a variety of microorganisms. Demonstrate knowledge of human nutritional needs and the role of nutrition in improving individual life and the societal economic impact of good versus bad nutrition. Relate technological advancements in medicine and food production to the advancement of the science of human nutrition. Provide examples of past and present nutrient and diet trends in modern society and the positive and/or negative implications for human health and earth's resources.
- Apply the principles of proper nutrition to each phase in the life cycle, specifying the particular nutritional choices most important during pre-pregnancy, pregnancy, lactation, infancy, childhood, adolescence, and older adulthood.





# DAVIS ESSENTIAL SKILLS AND KNOWLEDGE

## **Performance Skills**

- FCCLA Integration into the course.
- Develop professional and interpersonal skills needed for success in industry.

