# KIN 173: INTRODUCTION TO NUTRITION

## **Citrus College Course Outline of Record**

Heading	Value
Effective Term:	Fall 2023
Credits:	3
Total Contact Hours:	54
Lecture Hours :	54
Lab Hours:	0
Hours Arranged:	0
Outside of Class Hours:	108
<b>Total Student Learning Hours:</b>	162
Strongly Recommended:	ENGL 101.
District General Education:	E2. Fitness/Health Science
Transferable to CSU:	Yes
Transferable to UC:	Yes - Approved
Grading Method:	Standard Letter, Pass/No Pass

### **Catalog Course Description**

This course is designed to provide knowledge about the essential nutrients in a diet and their function in health and disease prevention throughout life in western society. Recommended intakes of nutrients needed during different life stages for healthy function of the body to prevent deficiencies, toxicities, and chronic disease is instructed, as well as kilocalorie balance, metabolism, and adjustment in nutrient intakes based on physical activity. 54 lecture hours.

# **Course Objectives**

- Identify the structure and function of nutrients and primary food sources of nutrients in various ethnicities and cultures.
- Understand digestion of foods and the absorption and metabolism of nutrients.
- Assess personal caloric balance using the Nutritional Analysis
   Tool by documenting food intake and physical activities/exercise
   performed for several days to determine daily caloric intake,
   expenditure, to evaluate energy balance and metabolism in the
   prevention of obesity and risk of disease.
- Evaluate and analyze their nutritional status by documenting food intake using the Nutritional Analysis Tool, and comparing this record to nutritional guidelines and recommended intakes, using scientific principles to evaluate nutrient deficiencies or toxicities to learn the characteristics of proper nutrition and prevention of disease in Western society.
- Analyze risk for disease by assessing their personal levels of body composition by using various methods of body composition analysis such as Micro Fit, Electrical Impedance, HealthStatus.com, Nutrition.gov and other internet links and comparing these levels to recommended standards.
- Understand the impact of nutrition and related chronic diseases on socioeconomic environment.

#### **Major Course Content**

- 1. Introduction to Nutrition for Health, Fitness, and Sports Performance
  - a. Psychosocial and Cultural Aspects of Eating
  - b. Characteristics of Good Health
    - Prevalence of obesity and prevention of chronic disease within our society and worldwide
  - c. Basic Nutrients
  - d. Current Nutritional Guidelines and Recommendations
    - i. Daily recommended intakes
    - Prevention of malnutrition and chronic disease within our society
- 2. Healthful Nutrition for Fitness and Sport
  - a. Health Related Components of Physical Fitness
  - Daily Recommended Intake Needs with Increased Physical Activity
  - c. Health and Fitness for the Prevention of Disease
- 3. Human Energy
  - a. The Digestive system and Digestion of Food
  - b. Absorption of Nutrients
  - c. Nutrients and Energy System Metabolism Based on Different Physical Activities
  - d. Energy Balance
- 4. Carbohydrates: The Main Energy Food
  - a. Sources
  - b. Digestion, Absorption, and Metabolism
  - c. Role of Carbohydrates in a Healthy Diet
    - i. Diabetes
- 5. Fat: An Important Energy Source during Exercise
  - a. Sources
  - b. Digestion, Absorption, and Metabolism
  - c. Role of Fats in a Healthy Diet
    - i. Cardiovascular disease
- 6. Protein: The Tissue Builder
  - a. Sources
  - b. Digestion, Absorption, and Metabolism
  - c. Role of Protein in a Healthy Diet
- 7. Vitamins: The Organic Regulators
  - a. Sources
  - b. Role of Vitamins in a Healthy Diet
  - c. Consequences of Deficiency or Toxicity of Vitamins
- 8. Minerals: the Inorganic Regulators
  - a. Sources
  - b. Role of Minerals in a Healthy Diet
  - c. Consequences of Deficiency or Toxicity of Vitamins
- 9. Water, Electrolytes and Temperature Regulation
  - a. Function of Water in the Body
  - b. Sources of Water
- 10. Body Weight and Composition for Health and Sport
  - a. Define Healthy Body Composition
  - b. Measurement of Body Composition
  - c. Causes of Obesity
  - d. Health Risks associated with Obesity
- 11. Weight Maintenance and Loss through Proper Nutrition and Exercise

- a. Energy Balance
- b. Nutritional Assessment
- c. Identify Reasonable Strategies for Weight Loss
- 12. Weight Gaining through Proper Nutrition and Exercise
  - a. Energy Balance
  - b. Nutritional Assessment
  - c. Identify Reasonable Strategies for Weight Loss
- 13. Food, Drugs and Related Supplements
- 14. Lifecycle Nutrition
  - a. Pregnancy through Infancy
  - b. Toddlers through Later Years

#### Suggested Reading Other Than Required Textbook

Internet Resources

# Examples of Required Writing Assignments

Research Paper Website Group Papers

#### **Examples of Outside Assignments**

Using information covered in the text, classroom discussion, and personal exploration, each student will evaluate their current nutritional status/diet, track eating habits, create a plan to support or improve nutritional intake, identify health risks associated with current fuel consumption, and summarize results of dietary changes and their impact. Student will also include their findings from their Activity Tracker, listing some ideas for improving their physical activity level. Include in the paper an evaluation of their Energy Balance and possible risks that may be associated with their Energy Balance. The Paper should be in paragraph format, using a title page and a citation page, 4-6 pages in length. Please check your spelling and grammar. May include charts or diagrams. At least 2 professional citations/scholarly journals required, not including your textbook.

## **Instruction Type(s)**

Lecture, Online Education Lecture

# **IGETC Area 4: Social and Behavioral Sciences**

4. Social and Behavioral Sciences