

**Virginia Western Community College**  
**HRI 122**  
**Applied Nutrition for Food Service Laboratory**

**Prerequisites**

Corequisite: HRI 119

**Course Description**

Includes application of skill sets for understanding, reviewing, revising, scaling, and preparing existing recipes and the creation of new recipes with a focus on healthy cooking techniques, alternative products, and critical thinking. Laboratory 3 hours per week.

**Semester Credits: 1 Lecture Hours: 1 Lab/Clinical/Internship Hours: 3**

**Required Materials****Textbook:**

**Techniques of Healthy Cooking 4th edition by The Culinary Institute of America ISBN#: 978047063543-8**

**Other Required Materials:**

Notebook, pens, calculator, 2 (preferred) full uniforms, consisting of: chef jacket with school logo and name embroidered, black & white chef check pants, neckerchief, slide, white apron, white Baker's Cap, black closed-heel, closed toe, non-skid shoes.

**Course Outcomes**

**At the completion of this course, the student should be able to:**

1. Understand the elements of food, such as protein, fat and carbohydrates
2. Understand the latest food guide pyramid and utilize it within the food service industry.
3. Understand the cultural aspects/restrictions of food.
4. Understand healthy menus and healthy cooking
5. Understand the relationship between nutrition and disease
6. Have working knowledge of weight management as it relates to nutrition.
7. Understand and exemplify professionalism
8. Identify governmental nutritional guidelines
9. Identify the principles of cooking and storage techniques for maximum retention of nutrients.
10. Demonstrate a positive work ethic
11. Demonstrate conflict resolution skills
12. Demonstrate integrity
13. Demonstrate team work skills

14. Demonstrate diversity awareness
15. Demonstrate effective speaking and listening skills
16. Demonstrate critical thinking and problem solving Skills.
17. Demonstrate healthy behaviors and safety skills
18. Demonstrate time, task and resource management skills

## **Topical Description**

### Chapter 1 Introduction to Nutrition

- Factors influencing food selection
- Basic nutrition concepts
- Characteristics of a nutritious diet
- Nutrient recommendations

### Chapter 2 Using Dietary Recommendations, Food Guides, and Food Labels to Plan

Menus

- Dietary guidelines and food guides
- Food labels
- Portion size comparisons

### Chapter 3 Carbohydrates

- Functions of Carbohydrates
- Simple Carbohydrates (sugars)
- Complex carbohydrates (starches and fiber)
- Digestion, Absorption, and metabolism of carbohydrates
- Dietary recommendations for carbohydrates

### Chapter 4 Lipids, Fats and Oils

- Functions of Lipids
- Triglycerides
- Essential fatty acids
- Cholesterol
- Lipids and health
- Dietary recommendations

### Chapter 5 Protein

- Structure of protein
- Functions of protein

- Digestion, absorption, and metabolism
- Protein in food
- Health effects of protein
- Dietary recommendations for protein

#### Chapter 6 Vitamins

- Characteristics of vitamins
- Fat soluble vitamins
- Water soluble vitamins

#### Chapter 7 Water and Minerals

- Water
- Major Minerals
- Trace minerals

#### Chapter 8 Balanced Cooking Methods and Techniques

- Flavor
- Balanced methods and techniques for a healthy eating style

#### Chapter 9 Recipe Makeovers

- Appetizers
- Entrees
- Sauces and Dressings
- Desserts

#### Chapter 10 Balanced Menus

- Recipe modification
- Appetizers
- Soups
- Salads & dressings
- Entrees
- Side dishes
- Balanced Sauces
- Desserts
- Morning and afternoon breaks
- Presentation
- Recipes

### Chapter 11 Handling Customer Special Nutrition Requests

- Low kilocalorie
- Low fat and cholesterol
- Low sugar
- Low sodium
- Food allergies
- Gluten free
- Low lactose
- Vegetarian and Vegan

### Chapter 12 Weight Management and Exercise

- “How much should I weigh?”
- How Obesity effects your health
- How to lose weight

### Chapter 13 Nutrition for all ages

- Nutrition and menu planning for children
- Nutrition and menu planning for adolescents
- Nutrition over the lifespan: older adults
- Eating disorders
- Nutrition for the athlete

## **Notes to Instructors**

- There is a project assigned in this class.