

# IMMACULATE CONCEPTION HIGH SCHOOL

## FOOD NUTRITION & HEALTH

### COURSE OUTLINE

#### GRADE 11

September 2024- April 2025

#### **Course Description:**

The Grade 11 CSEC Food and Nutrition course is designed to provide students with a comprehensive understanding of food, nutrition, and culinary skills. This course emphasizes the importance of nutrition in promoting health and well-being, and equips students with practical skills necessary for preparing balanced and nutritious meals. Through a combination of theoretical knowledge and hands-on experiences, students will explore a range of topics including nutrient functions, dietary planning, food preparation techniques, and food safety.

#### **Course Objectives:**

1. Nutritional Knowledge:
  - Understand the role of essential nutrients in maintaining health, including carbohydrates, proteins, fats, vitamins, and minerals.
  - Analyze the relationship between diet and health, and identify the impact of nutrient deficiencies and excesses on the body.
2. Dietary Planning and Management:
  - Develop skills in planning balanced diets that meet various nutritional needs, including those for different age groups, lifestyles, and health conditions.
  - Create meal plans and menus that reflect dietary guidelines and cater to special dietary requirements.
3. Food Preparation Techniques:
  - Gain proficiency in basic and advanced food preparation techniques, including cooking, baking, and preservation.
  - Learn to prepare a variety of dishes from different cuisines, emphasizing flavour, presentation, and nutritional value.
4. Food Safety and Hygiene:
  - Understand and apply principles of food safety and hygiene to prevent foodborne illnesses and ensure safe food handling practices.
  - Learn proper storage techniques and practices for maintaining food quality and safety.
5. Cultural and Social Aspects of Food:

- Explore the cultural and social significance of food in different societies and how it influences dietary habits and food choices.
  - Analyze how food practices and preferences vary across cultures and regions.
6. Food Technology and Innovations:
- Investigate recent advancements in food technology, including food processing, packaging, and preservation methods.
  - Understand the role of technology in improving food safety, quality, and sustainability.

## Student Learning Outcomes

### 1. Raising Agents:

- **Understand and Identify Raising Agents:** Students will be able to identify various types of raising agents (chemical, biological, and physical) and describe their functions in baking and cooking.
- **Apply Raising Agents Effectively:** Students will demonstrate the ability to use different raising agents in recipes, explaining the effects of each type on texture and volume in baked goods.

### 2. Consumerism:

- **Analyze Consumer Products:** Students will be able to evaluate food products based on nutritional information, ingredient lists, and packaging claims, understanding the implications for health and wellness.
- **Make Informed Choices:** Students will demonstrate the ability to make informed and ethical food purchasing decisions, considering factors such as sustainability, cost, and quality.

### 3. Kitchen Equipment:

- **Identify and Use Kitchen Equipment:** Students will be able to identify essential and specialized kitchen equipment, demonstrating proper use and maintenance for each tool.
- **Ensure Safety and Efficiency:** Students will practice safe handling, cleaning, and storing of kitchen equipment to ensure a safe and efficient cooking environment.

### 4. Kitchen Planning:

- **Design an Effective Kitchen Layout:** Students will be able to design a functional kitchen layout, incorporating principles of ergonomics and efficiency to enhance workflow and organization.
- **Organize Kitchen Space:** Students will demonstrate skills in organizing kitchen equipment, ingredients, and tools to optimize space and improve cooking efficiency.

### 5. Accidents in the Kitchen:

- **Prevent and Manage Kitchen Accidents:** Students will be able to identify common kitchen accidents (e.g., burns, cuts) and apply preventive measures to reduce the risk of injury.
- **Respond to Emergencies:** Students will demonstrate basic first aid skills for treating kitchen-related injuries and effectively manage emergencies to ensure safety in the kitchen.

### 6. Food Labels:

- **Interpret Food Labels:** Students will be able to read and interpret food labels, understanding nutritional facts, ingredient lists, and allergen information to make healthier food choices.

- **Compare Products:** Students will demonstrate the ability to compare food labels from various products to evaluate nutritional content and make informed purchasing decisions.

#### 7. Soups:

- **Prepare Various Soups:** Students will be able to prepare different types of soups (clear, thick, specialty) using appropriate techniques and ingredients to achieve desired flavours and textures.
- **Evaluate Soup Quality:** Students will demonstrate the ability to assess and critique soups based on taste, texture, and presentation, making adjustments as needed for improvement.

#### 8. Beverages:

- **Create Beverages:** Students will be able to prepare a variety of beverages (juices, smoothies, teas, specialty drinks) using appropriate techniques and ingredients, ensuring quality and flavor.
- **Present and Garnish Beverages:** Students will demonstrate skills in presenting and garnishing beverages to enhance visual appeal and taste, creating attractive and enjoyable drink options.

### Topical outline

#### 1. Raising Agents

- Introduction to Raising Agents:
- Types of Raising Agents:
  - Chemical (baking powder, baking soda)
  - Biological (yeast)
  - Mechanical (air, steam)
- Functions and Reactions:
  - How raising agents work in baking and cooking
  - The role of acid and base in chemical reactions
  - How to use different raising agents in various recipes
  - Troubleshooting common issues related to raising agents

#### 2. Practical Activities:

- Experiment with recipes using different raising agents
- Compare the effects of chemical versus biological raising agents

#### 3. 2. Consumerism

- Understanding Consumerism:
- Consumer Rights and Responsibilities:
  - Knowledge of consumer rights in food purchasing
  - Understanding responsibilities towards sustainable and ethical consumption
- **Evaluating Food Products:**
- **Product Label Analysis:**
  - How to read and interpret food labels for nutritional value and ingredients
  - Understanding expiry dates, storage instructions, and certifications
- **Practical Activities:**

- Conduct a product comparison exercise based on nutritional information and price
4. Create label for a specific product.

### 5. **3 Kitchen Equipment**

- Types of Kitchen Equipment:
- Essential Tools:
  - Knives, cutting boards, pots, pans, mixers, and measuring tools
- **Specialized Equipment:**
  - Blenders, food processors, ovens, and various small appliances
- Maintenance and Safety:
  - Proper Use and Care: Techniques for safe and effective use of kitchen equipment.
  - Cleaning and maintaining kitchen tools and appliances
- **Practical Activities:**
  - Identify and demonstrate the use of various kitchen tools
  - Create a maintenance checklist for kitchen equipment

### 6. **4. Kitchen Planning**

- Effective Kitchen Layout:
- Design Principles:
  - Ergonomics and efficiency in kitchen design
  - Zoning for different tasks (prep area, cooking area, cleaning area)
  - Effective storage for utensils, ingredients, and appliances
  - Managing kitchen space to improve workflow and efficiency
- **Practical Activities:**
  - Design a kitchen layout and plan a workflow for a specific task or meal
  - Organize a kitchen space according to best practices

### 7. **5. Accidents in the Kitchen**

- **Types of Accidents:**
  - Burns, cuts, slips, and falls
  - Strategies for preventing accidents and handling emergencies
  - First aid for burns, cuts, and other common injuries
  - Proper response to kitchen accidents
- **Practical Activities:**
  - Demonstrate first aid techniques for various kitchen-related injuries

- Conduct a safety audit of a kitchen space and propose improvements

## 8. 6. Food Label

- Key components of food labels (nutrition facts, ingredients list, allergens)
- How food labelling is regulated and what standards must be met
- **Practical Activities:**
- Analyze and compare food labels from various products
- Create a guide on how to read and understand food labels effectively

## • 7. Soups

- **Types of Soups:**
- Clear soups (broths, consommés), thick soups, speciality soups
- **Preparation Techniques:**
- **Basic Methods:**
- Stock and broth preparation
- Techniques for thickening soups and adding flavours
- **Practical Activities:**
- Prepare a variety of soups, focusing on different techniques and ingredients
- Conduct a tasting session to evaluate and compare different soups

## 9. 8. Beverages

- Non-Alcoholic Beverages: Juices, smoothies, teas, coffee.
- **Specialty Drinks:**
- Mocktails, flavoured waters, and health drinks
- Techniques for juicing, blending, and brewing
- Presentation and garnishing of beverages
- **Practical Activities:**
- Prepare a range of beverages, experimenting with flavours and ingredients
- Create and present a beverage menu for a specific event or theme

## Teaching Methods and Student Learning Activities

### 1. Raising Agents

#### Teaching Methods:

- **Lectures and Presentations:** Use visual aids and slides to explain different types of raising agents (chemical, biological, physical), their functions, and their applications in cooking and baking.

- **Demonstrations:** Show how different raising agents are used in recipes and their effects on the texture and volume of baked goods.
- **Practical Baking Sessions:** Have students bake various items using different raising agents (e.g., cakes with baking powder, bread with yeast) and compare the results.
- **Lab Reports:** Students conduct experiments with raising agents and write reports detailing their observations and conclusions.
- **Class Discussion:** Facilitate a discussion on troubleshooting common issues related to raising agents, such as why a cake might not rise properly.

## 2. Consumerism

### Teaching Methods:

- **Interactive Lectures:** Discuss consumer rights and responsibilities, ethical consumerism, and how to interpret food labels.
- **Case Studies:** Analyze real-world examples of food products and marketing strategies to understand consumerism and its impact.

### Student Learning Activities:

- **Food Label Analysis:** Provide students with a variety of food labels to analyze, comparing nutritional content, ingredients, and claims.
- **Consumer Comparison Project:** Have students research and present on different products, evaluating them based on price, quality, and sustainability.
- **Debate:** Organize a debate on ethical consumerism topics, such as the impact of food production on the environment.

## 3. Kitchen Equipment

### Teaching Methods:

- **Hands-On Demonstrations:** Show how to use, clean, and maintain various kitchen equipment through live demonstrations.
- **Visual Aids:** Use diagrams and videos to illustrate different types of kitchen equipment and their functions.

### Student Learning Activities:

- **Equipment Identification Exercise:** Have students label and identify various kitchen tools and appliances in a practical session.
- **Maintenance Checklist:** Create a checklist for proper maintenance and care of kitchen equipment and have students apply it in a practical setting.
- **Group Presentations:** Students present on a specific piece of equipment, explaining its use, maintenance, and safety considerations.

## 4. Kitchen Planning

### Teaching Methods:

- **Design Workshops:** Conduct workshops on effective kitchen layout and planning, using floor plans and design software if available.
- **Interactive Lectures:** Discuss principles of ergonomics and efficient kitchen organization.

#### **Student Learning Activities:**

- **Kitchen Layout Design:** Have students design a kitchen layout for a hypothetical or real space, considering workflow and space utilization.
- **Organizational Challenge:** Task students with organizing a cluttered kitchen space, focusing on optimizing storage and workflow.
- **Group Projects:** Create and present a comprehensive kitchen planning project, including layout, storage solutions, and workflow improvements.

### **5. Accidents in the Kitchen**

#### **Teaching Methods:**

- **Safety Demonstrations:** Demonstrate common kitchen accidents and their prevention methods, including first aid procedures.
- **Interactive Discussions:** Discuss safety protocols and accident prevention strategies.

#### **Student Learning Activities:**

- **First Aid Practice:** Conduct practical sessions on first aid for common kitchen injuries, such as burns and cuts.
- **Safety Audit:** Perform a safety audit of a kitchen space, identifying potential hazards and proposing safety improvements.
- **Role-Playing:** Use role-playing scenarios to practice responding to kitchen accidents and emergencies.

### **6. Food Labels**

#### **Teaching Methods:**

- **Lectures on labelling Regulations:** Teach students about food labelling regulations and how to interpret nutritional information.
- **Workshops:** Conduct workshops on reading and comparing food labels, focusing on nutritional content and claims.

#### **Student Learning Activities:**

- **Label Analysis Activity:** Provide a variety of food products with labels for students to analyze and compare, focusing on nutritional value, ingredients, and allergens.
- **Label Creation Project:** Have students design their own food labels, including nutritional information and marketing claims, for a hypothetical product.
- **Interactive Quiz:** Use quizzes or games to test students' knowledge of food labels and their ability to make informed choices based on label information.

### **7. Soups**

#### **Teaching Methods:**

- **Cooking Demonstrations:** Demonstrate different techniques for preparing soups, including broths, purees, and cream soups.
- **Interactive Lessons:** Discuss the principles of soup making, including stock preparation, flavor development, and thickening methods.

#### **Student Learning Activities:**

- **Soup Preparation Lab:** Have students prepare a variety of soups, experimenting with different techniques and ingredients.
- **Soup Tasting and Evaluation:** Organize a tasting session where students evaluate and critique soups based on flavour, texture, and presentation.
- **Recipe Development:** Task students with creating their own soup recipes, incorporating different techniques and ingredients.

### **8. Beverages**

#### **Teaching Methods:**

- **Demonstrations:** Show how to prepare and present various types of beverages, including juices, smoothies, and specialty drinks.
- **Lectures:** Discuss the principles of beverage preparation, including flavour balancing, garnishing, and presentation.

#### **Student Learning Activities:**

- **Beverage Preparation Lab:** Have students prepare a range of beverages, focusing on technique, flavour, and presentation.
- **Recipe Innovation:** Challenge students to create and present their own unique beverage recipes, experimenting with flavours and ingredients.
- **Tasting Session:** Conduct a beverage tasting session where students sample and evaluate different drinks based on taste, presentation, and creativity.

Suggested reading texts.

#### **Suggested reading, texts.**

Caribbean Food & Nutrition for CSEC Anita Tull & Coward

Food & Nutrition Rita Dyer & Norma Maynard

Caribbean Food & Nutrition A Two Year Course Marchand & Miles.

**Prepared by Prudence Rennicks,**

**August 16 2024**