YISHUN SECONDARY SCHOOL
CRAFT & TECHNOLOGY DEPARTMENT – NFS UNIT
Secondary 3 Normal Academic

<table>
<tr><th colspan="2">The Food & Nutrition Curriculum and Approaches to Learning</th><th>Key Programmes</th></tr>
<tr><td colspan="2">The aim of Food & Nutrition (F&N) is to develop students' understanding of the concepts of nutrition and meal planning, develop their understanding of the link between diet and health and to understand the principles of food science.

Students explores the principles of food science through experiments and master culinary skills through practical sessions. Student-directed learning and authentic learning also enables students to be independent learners and to develop them into thinkers, innovators and contributors.

The knowledge and skills acquired through F&N will help students in making informed decisions concerning food and nutrition.</td><td>• Completion of all Food & Nutrition chapters
• Completion of Sec 3 Coursework
• Learn food preparation skills through practical sessions and Enrichment: Chef Programme</td></tr>
<tr><th>Term</th><th>Learning Experiences</th><th>Learning Outcomes</th></tr>
<tr><td>1</td><td><u>Theory:</u>
Theme: Essentials of Meal Planning
Chapter 1: Energy from Food
Chapter 2: Guidelines for Meal Planning
Chapter 3: Different types of nutritional needs

Theme:
Macronutrients
Chapter 4: Carbohydrates
Chapter 6: Fats
Chapter 7: Proteins</td><td>Students will be able to:
• State factors affecting energy needs; explain how energy is obtained from food; factors affecting energy value; why we need energy; energy balance concept and BMI, eating disorders
• Explain importance of balanced diet; uses of nutritional tools in meal planning;
• Identify factors to consider when planning balanced meals; use of nutritional tools, and ways to choose wisely when eating out
• State nutritional needs of individuals at various life stages and those who require special diets; and list factors to consider when planning meals
• State functions of carbohydrates, proteins and fats and recommended daily intake
• Describe different types of CHO; differentiate between dispensable and indispensable amino acids; HBV and LBV proteins and differences between saturated & unsaturated fats</td></tr>
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	<u>Coursework:</u> • Introduction to F&N Coursework • Section 1: Task Analysis • Section 2: Research	• List sources of simple & complex carbohydrates, animal and plant proteins, fats from animals and from plants • List ways of reducing fat and sugar intake; explain health problems related to excessive or insufficient CHO, fat and protein intake <u>Assessment for Learning:</u> • Topical quiz after every chapter completion • Weighted Assessment 1: Practical with theory component Students will be able to: • Introduction on all coursework sections • Dissemination of coursework question • Complete Task Analysis – Task structure on related factors for each keyword, Priority List for tasks to be completed and Overall Time Plan • Complete Research – expand on factors and elaboration of related factors in detail, with summary and conclusion
2	<u>Theory:</u> Theme: Food Preparation, Cooking and Evaluation □ Chapter 10: Vitamins □ Chapter 11: Minerals □ Chapter 12: Water and Dietary Fibre Theme: Food Commodities □ Chapter 5: Cereals □ Chapter 8: Meat & Alternatives □ Chapter 13: Fruit & Vegetables	Students will be able to: • Classify vitamins into fat-soluble and water-soluble vitamins; major and minor minerals; explain functions of specific vitamins and minerals in the body • State functions and sources of water and dietary fibre; list ways of increasing intake of water and dietary fibre and explain health problems related to excessive/ insufficient intake • Differentiate between insoluble and soluble dietary fibre • Identify parts of a cereal grain, list common nutrients in cereals and fruit/vegetables, and list guidelines on choosing • List common types of cereals and fruit/vegetables and their uses in cooking, describe effects of cooking on cereals, and describe how fruit/vegetables are used in

		cooking with ways to minimise nutrient loss • Describe characteristics of meat, poultry, seafood, eggs, dairy products, pulses and legumes • List nutritional content of each food, and ways of choosing and how each food is used in cooking <u>Assessment for Learning:</u> • Topical quiz after every chapter Completion • Weighted Assessment 2: Coursework (Decision Making & Planning)
	<u>Coursework:</u> • Section 3: Decision Making • Consultation on chosen dishes • Section 4: Planning	Students will be able to: • Complete Decision Making – choose suitable dishes for execution, find recipes, justify choices and modify accordingly • Complete Planning – do up food order list, equipment list, and time plan for the practical exam (execution of dishes)
JUNE HOLIDAYS		
3	<u>Theory:</u> Theme: Food Preparation, Cooking and Evaluation □ Chapter 14: Heat Transfer and Methods of Cooking □ Chapter 15: The Science Behind Food Preparation and Cooking	Students will be able to: • Explain reasons for cooking food • Describe types of heat transfer during cooking • State advantages and disadvantages of each cooking method • Describe the different types of reactions which occur in food during food preparation and cooking - Caramelisation, Gelatinisation, Dextrinisation, Smoking Point of Fat, Enzymatic Browning, Rancidity • Explain the functions and properties of key food ingredients used in making cakes, pastries, biscuits, batters, sauces, local cakes and desserts <u>Assessment for Learning:</u> • Topical quiz after every chapter Completion • Weighted Assessment 3: Written Paper (Chap 4, 6, 7, 10, 11 & 15)

	<u>Coursework:</u> • Briefing on Practical Exam • Section 5: Execution • Section 6: Evaluation • Consultation on all sections	Students will be able to: • Complete Execution – prepare dishes as planned • Complete Evaluation – sensory evaluation on each individual dish, and describe strengths, weaknesses and AFI
4	Revision: Chapters 1- 18 Coursework: • Completion of coursework • Submission of draft • Final submission	Students will be able to: • Revise on all chapters covered. • Complete all revision papers with target marks of 70-80m. <u>Assessment for Learning:</u> • Topical quiz <u>Semestral Assessment:</u> • EOY - Written paper (All chapters) + Coursework