

Yishun Secondary School

Sec Three G2 G3 Nutrition and Food Science Content Outline

The Curriculum and Approaches to Learning	Key Programme
The Nutrition and Food Science curriculum aims to enable students to lead a healthier lifestyle proactively through proper diet and nutrition. This is done by advocating sustainable food consumption through planning and making appropriate food choices. Students will also be able to apply principles of culinary science creatively in food preparation and cooking.	Organic vegetable farming (tie in with sustainable farming)

Term 1		
Week	Learning Experiences	Learning Outcomes
1	<u>Administrative matters</u> <ul style="list-style-type: none"> • Introduction • Food and kitchen safety • Administrative matters 	Students will be able to: <ul style="list-style-type: none"> • Set attainable targets. • Identify and explain the uses of different kitchen equipment. • Identify safety features in food labs, list steps on addressing injuries and guidelines of kitchen safety, personal hygiene, and food hygiene
2	<u>Theory</u> Chap 8: Diet & Meal Planning Chap 9: Meal Analysis	Students will be able to: <ul style="list-style-type: none"> • Explain the term balanced diet. • Explain the concept of energy balance and factors to consider when planning meals for different individuals. • Evaluate and modify recipes using My Healthy plate, recommended dietary allowance (RDA) and Food composition table.
3	<u>Theory</u> Chap 2: Carbohydrates Chap 13: Reactions in Food during preparation and cooking (Cereals/ Carbohydrates)	Students will be able to: <ul style="list-style-type: none"> • State the chemical element that makes up a carbohydrate molecule. • State the functions of carbohydrates in the body and provide food examples of carbohydrates. • Identify the various reactions that occur in the preparation and cooking of carbohydrates.
4	<u>Practical: Quiche</u> <u>Theory</u> Chapter 13: Reactions in Food during preparation and cooking (proteins).	Students will be able to: <ul style="list-style-type: none"> • Apply the skill set of rubbing in to prepare a pastry, as well as various knife skills. • Prepare the quiche using MOC (Baking).
5	<u>Theory</u> Chapter 1: Proteins	Students will be able to:

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Week	Learning Experiences	Learning Outcomes
	Activity on sustainable food consumption (tie in with vegetable farm)	Students will be able to: <ul style="list-style-type: none"> • State the chemical elements that make up a protein molecule. • State the function of protein in the body and provide relevant examples. • Able to identify food sources that are of HBV and LBV, as well as examples on complementary protein. • Explain the food reaction that occurs in the preparation and cooking of protein.
6	<u>Theory</u> Chapter 13: Reactions in food during preparation and cooking (eggs) Chap 3: Fats	Students will be able to: <ul style="list-style-type: none"> • State the chemical elements of a fat molecule. • State the function of fats in the body and provide relevant examples. • identify examples of saturated and unsaturated fats. • Explain the food reaction that occurs in the preparation and cooking of fats.
7	<u>Theory</u> Chap 13: Reactions in Food during preparation and cooking (Fats)	Students will be able to: <ul style="list-style-type: none"> • Explain the food reaction that occurs in the preparation and cooking of fats.
8	<u>WA 1 (25M)</u>	Students will be able to: <ul style="list-style-type: none"> • To consolidate learning through formative assessment.
9	<u>WA1 Review</u> <u>Coursework</u>	Students will be able to: <ul style="list-style-type: none"> • Review the results and seek clarifications. • Analyze the coursework question. - Going through of task question and task structure - Coursework checklist for AFL
10	<u>Practical: Cupcakes</u>	Students will be able to: <ul style="list-style-type: none"> • Prepare cupcakes using the creaming method, and successfully bake cupcakes in the oven.

Term 2		
Week	Learning Experiences	Learning Outcomes
1	<u>Theory</u> Chap 4: Vitamins <u>Coursework</u> Research Draft 1 Submission	Students will be able to: <ul style="list-style-type: none"> Identify and classify vitamins into fat-soluble vitamins (A, D, E and K) Water soluble vitamins (B1, B2, B3, B12 and C) List the food sources. Present detailed and relevant research that is linked to the task Present very well organised research gathered from a wide range of sources
2	<u>Theory</u> Chap 5: Minerals <u>Coursework</u> Research Draft 2 Submission	Student will be able to: <ul style="list-style-type: none"> List the food sources of the following minerals: calcium, phosphorous, iron, sodium chloride and potassium Explain the functions of calcium, phosphorus, iron, sodium chloride and potassium in the body
3	<u>Practical: High fibre pizza</u>	Students will be able to: <ul style="list-style-type: none"> Prepare pizza using yeast dough and to prepare the toppings using various knife skills and bake the pizza in the oven.
4	Revision for SA2	
5	Student's Learning Fest	
6	<u>Coursework</u> Investigation Draft 1	Students will be able to: <ul style="list-style-type: none"> Present an investigation plan which includes: an investigation aim that is clear and comprehensive. detailed and logical investigation process and data collection methods.
7	<u>Coursework</u> Investigation/ Exploratory studies (2.5hr)	Students will be able to: <ul style="list-style-type: none"> Carry out investigation proficiently and methodically
8	WA 2 (45M)	Students will be able to: <ul style="list-style-type: none"> Consolidate learning through formative assessment.
9	WA2 Review	Students will be able to: <ul style="list-style-type: none"> Review the results seek clarifications
10	<u>Coursework</u> Submission of investigation	Students will be able to: <ul style="list-style-type: none"> Record a range of observations that are relevant and accurate.

Term 2		
Week	Learning Experiences	Learning Outcomes
		<ul style="list-style-type: none"> Show thorough interpretation of results with good application of relevant food science content

Term 3		
Week	Learning Experiences	Learning Outcomes
1	<u>Theory</u> Chap 6: Water and dietary fibre <u>Coursework</u> Decision making Draft 1	Students will be able to: <ul style="list-style-type: none"> Explain the factors that affect water intake: state of health, diet, level of activity and environment. List the food sources of water in the diet. Explain the functions of dietary Fibre and identify the food sources rich in dietary fibre.
2	<u>Coursework</u> Decision making	Students will be able to: <ul style="list-style-type: none"> Select final dishes that are all appropriate Provide detailed justification based on a wide range of factors presented in the previous research
3	<u>Theory</u> Chap 13: Reactions in Food during preparation and cooking (i) meat (ii) poultry (iii) seafood	Students will be able to: <ul style="list-style-type: none"> Understand the preparation and cooking of various food commodities.
4	<u>Theory</u> Chap 13: Reactions in Food during preparation and cooking (iiii) dairy products (vi) fruit (vii) vegetables (viii) pulses and legumes	Students will be able to: <ul style="list-style-type: none"> Understand the preparation and cooking of various food commodities.
5	<u>Coursework</u> Planning	Students will be able to: <ul style="list-style-type: none"> Includes all recipes with a thorough list of ingredients, materials, equipment, and methods.

Term 3		
		<ul style="list-style-type: none"> Develops a time plan that is well sequenced and shows efficient use of time and resources
6	<u>Theory</u> Essay writing: Patchwork assessment	Students will be able to: <ul style="list-style-type: none"> Attempt and complete patchwork assessment to master essay writing using PEEL format.
7	WA3	Students will be able to: <ul style="list-style-type: none"> Consolidate learning through formative assessment.
8	WA3 Review	Students will be able to: <ul style="list-style-type: none"> Review the results seek clarifications
9	Execution Exam	

Term 4		
Week	Learning Experiences	Learning Outcomes
1	<u>Coursework</u> Submission of evaluation	Students will be able to: <ul style="list-style-type: none"> Provide detailed sensory evaluation of all dishes, using appropriate sensory terms. Provide detailed review (strengths, weaknesses and suggestions for improvement) of the execution process
2	SA2 Revision	
3	Start of EOY	