WJEC Applied Science Food & Nutrition Curriculum Sequencing

Year 12:

Course	Year	Term	Big Ideas	Subject Learning Checklist
Food science	12	Term 1	Unit 1	
and nutrition		56	External exam	
			Internal assessment	AC1.1 Explain how individuals can take responsibility for food safety
				AC1.2 Explain methods used by food handlers to keep themselves clean and
			LO1 Understand the importance of	hygienic
			food safety	AC1.3 Explain methods used keep work areas clean and hygienic
				AC1.4 Analyse risks associated with food safety
			LO2 Understand properties of	AC2.1 Explain how nutrients are structured and explain how nutrients are
			nutrients	structured Nutrients • Proteins • Lipids • Carbohydrates • Minerals • Vitamins • Water
				Learners should understand how nutrients are structured and use chemical terms and models.
				AC2.2 Classify nutrients in foods • Biological value • Glycemic Index •
				Nutrient density • Sources of nutrients • Complementary actions of nutrients Learners should know the main and secondary sources of all nutrients and
				classify in different ways. Learners should know how to use different types of resources to classify nutrients in foods e.g. • Food labels • Recipes • nutrients
				AC2.3 Assess the impact of food production methods on nutritional value assess the impact of food production methods on nutritional value Food
				production methods • Cooking methods • Packaging /Storage methods •
				Preservation methods • Fortification of foods Cooking methods could include:
				• Boiling • Steaming • Roasting • Deep fat frying. Packaging/Storage methods could include: • Vacuum packing • Cold store • Aseptic Food Processing and
				Packaging (AFP). Preservation methods could include: • Freezing • Jamming • UHT.

	LO3 understand the relationship between nutrients and the human body	AC3.1 Describe functions of nutrients in the human body describe functions of nutrients in the human body Functions • Growth and development • Production of energy • Regulate metabolism Learners should be able to describe the functions of each type of nutrient specified in AC3.3 Analyse nutritional needs of specific groups AC3.2 Explain characteristics of unsatisfactory nutritional intake AC3.4 Assess how different situations affect nutritional needs AC4.1 Evaluate fitness for purpose of diets AC4.2 Calculate nutritional requirements for given individuals
	LO4 be able to plan nutritional requirements	
Term 2 56	Unit 1 External exam Internal assessment LO5 be able to plan production of complex dishes	AC5.1 interpret recipes for complex menus Complex menus • Combination of hot and cold dishes • Using advanced techniques • Using technical terms • No processed foods Interpret • Skills and techniques required • Commodities required • Timings Students should have the opportunity to use recipes from a wide range of resources/sources both new and old e.g. recipe books, internet web sites, magazines.

	LO6 be able to cook complex dishes	AC5.2 plan production of menus Plan • Sequencing • Timing • Preparation • Cooking • Presentation/finishing • Waste • Equipment • Tools • Methods • Presentation/finishing of final dishes • Contingencies • Health, safety and hygiene • Quality points • Storage • Service style AC6.1 use tools in preparation of commodities Tools • Knives • Utensils • Equipment • Electrical equipment Use • Preparing commodities • Using advanced techniques • Minimising waste Learners should develop skills in the use of tools and equipment as available within the centre. The focus should be on using tools with precision and speed. AC6.2 use advanced techniques in preparation of commodities Advanced techniques (preparation) • Turning • Shaping • Carving • Larding • Boning (meat) • Tenderising • Blending • Mincing • Enriching • Separating • Filleting (fish) • Moulding Learners should develop skills needed to use the advanced techniques listed. Learners should be familiar with the names of the techniques, the skills and methods involved and how to use techniques with speed and precision. AC6.3 assure quality of materials to be used in food preparation Quality Smell/Aroma Touch Sight Storage Packaging Materials • Equipment • Tools • Commodities AC6.4 use advanced techniques in cooking of commodities AC6.5 present cooked complex dishes using advanced presentation techniques AC6.6 use food safety practices AC6.7 monitor food production
Term 3 56	Unit 1 External assessment	Revision for unit 1 exam. May/June Practical assessment completed May
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	Internal assessment	

Year 13:

Course	Year	Term	Big Ideas	Subject Learning Checklist
Food science	13	Term 1	Unit 2	AC1.1 describe properties of microorganisms
and Nutrition		<i>56</i>		
			LO1 understand how microorganisms	AC1.2 assess how changing conditions affect growth of
			affect food safety	microorganisms in different environments
				AC1.3 explain how microorganisms affect food quality
			LO2 understand how food can cause ill	AC1.4 assess how preservation methods prevent the growth of AC2.3
			health	record outcomes
				of investigative workmicro-organisms
				AC2.1 explain the physiology of food intolerances
			Unit 3	AC2.2 explain the physiological basis of food allergies
			LO1 understand the scientific	AC2.3 explain the physiological basis of food poisoning
			properties of food	AC2.4 describe the symptoms of food induced ill health
			LO2 be able to scientifically	
			investigate changes to food	AC1.1 explain how food properties can be changed
				AC1.2 explain variables that affect physical properties of food
				AC2.1 set success criteria for scientific investigation
				AC2.2 obtain outcomes from scientific investigations
		Term 2	Unit 2	
		<i>56</i>	LO3 understand how food safety is	AC3.1 describe food safety hazards in different environments
			managed in different situations	AC3.2 assess risk to food safety in different environments
				AC3.3 explain control measures used to minimise food safety risks
				AC3.4 justify proposals for control measures in different environments
				AC2.4 process data
				AC2.5 review suitability of investigative methods
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	Unit 3	AC3.1 analyse food production situations
	LO2 be able to scientifically	
	investigate changes to food	AC3.2 propose practical options to solve food production problems
	LO3 be able to solve food production	AC3.3 scientifically justify proposed options
	problems	
	LO1 Understand the scientific	AC1.1 Explain how food properties can be changed
	properties of food	AC1.2 Explain variables that affect physical properties of food
	LO2 Be able to scientifically	AC2.1 Set success criteria for scientific investigations
	investigate changes to food	AC2.2 Obtain outcomes from scientific investigations
		AC2.3 Record outcomes of investigative work
		AC2.4 Process data
		AC2.5 Review suitability of investigative methods
	LO3 Be able to solve food production	AC3.1 Analyse food production situations
	problems	AC3.2 Propose practical options to solve food production problems
		AC3.3 Scientifically justify proposed options
Term 3 18	Unit 2	A controlled external assessment is completed
	Unit 3	A controlled internal assessment is completed