Curriculum Overview

Subject: Food Preparation & Nutrition

Year Group: 11

CHASE HIGH SCHOOL
AMBITION - RESILIENCE - KINDNESS

Students are working in line with the AQA GCSE Food Preparation and Nutrition specification. Students are developing their skills and knowledge and applying what they

have learnt to their NEA 1 and NEA 2. Investigation project and Food Preparation task.

Students will work on their NEA using the given topics supplied by AQA.

TERM 1	TERM 2	TERM 3
KNOWLEDGE/SKILLS **1st September – NEA1 Release Date** Three sets of criteria are sent for students to select one they wish to complete. - Food science knowledge recall - Research greater depth - Investigation planning - Conducting investigations - Report writing - Sensory analysis **Completion date October 30th** **1st November – NEA2 Release Date** - Choice of topics - Task analysis: recall prior learning - Research: providing greater depth. - Dish research: 10 dishes - Practical: 4 dishes - Produce written report on nutritional content, sensory analysis and criteria of the task.	KNOWLEDGE/SKILLS NEA2 Continued - Menu planning – drawing specific links to skills, ingredients or nutrients. - Creating a time plan. - Practical exam run through: students produce three dishes in an allocated time period (three hours) - Written analysis report on the nutritional content, costing and sensory analysis of each dish. - Produce a final evaluation explaining all outcomes. **Completion Date February 15th** **Nutritional Needs and Health** Protein – what protein is made up of, functions, natural substances, biological values, protein complementation, alternatives, deficiency, excess and RDA's.	KNOWLEDGE/SKILLS **Food Science** Why do we cook food. Heat Transfer - conduction, convection, radiation. Cooking methods – frying, shallow frying, deep frying, simmering, braising, baking, roasting, sauteeing, boiling, steaming, grilling, microwaving, toasting etc. Functional and Chemical Properties - Protein: Denaturation, coagulation, gluten, foams. - Carbohydrates: Gelatinisation, dextrinisation and caramelisation. - Fats: Plasticity, aeration, shortening and emulsification. Raising Agents Mechanical, chemical and biological raising agents. Carbon dioxide | fermentation **Food Safety**

	Fats – chemical structures, functions, saturated, unsaturated, deficiency effects, excess effects, adipose fat, visceral fat. Carbohydrates – Photosynthesis, functions, fibre, effects of deficiency and excess, RDA's, simple carbs, complex carbs, monosaccharides, disaccharides, polysaccharides, tooth decay, energy levels. Vitamins and Minerals – fat-soluble, water-soluble, functions, effects of deficiency and excess, antioxidants. Lifestages – Looking at all lifestages, nutrients required to support processes, infancy, childhood, adolescence, adulthood and elderly. Analysing each ones dietary needs. Energy Needs – BMR, PAL, energy balance, calorie intake, calorie output, effects of too much and too little energy Diet-Related Diseases – obesity, cardiovascular disease, skeletal, anaemia and diabetes. Assessing dietary needs, impact on the body, coronary heart disease, rickets, osteoporosis, osteomalacia.	Micro-organisms – types of micro-organisms, bacteria, yeast, mould. Analysing binary fission and what impacts the rate, palatability, contamination, cross contamination. Micro-organisms used in food production. Bacterial contamination – food poisoning, campylobacter, E.coli, salmonella, listeria and staphylococcus, incubation periods. Temperatures – storage areas, cupboard, fridge, freezer. **Food Provenance** Understanding where food comes from: growing, rearing, catching, gathering, specialist equipment, polytunnels, hydroponic production. Farming methods – organic, intensive, advantages, disadvantages, fallow land. Genetic Modification – deoxyribonucleic acid, growth rates, resistance, sensory qualities, nutritional content. Food and environment – climate change, greenhouse gases, global warming, severe weather conditions, food production, food miles, food waste, primary and secondary processing and food sustainability. Technological Developments – food additives, fortification, nutritional content, e-numbers, advantages and disadvantages.

KEY ASSESSMENTS	KEY ASSESSMENTS	KEY ASSESSMENTS
Half term 1: Internal nutritional needs test PPE exam	Half term 1: PPE Exam	Half term 1: Topic Tests | Exam Preparation | Walk Throughs Half term 2: Exam
Extended reading suggestions and external resources: Jenny Ridgewell BBC Good Food Guide BBC Bitesize		