CHURCH STRETTON SCHOOL	Department	Key stage 4

	Term	Topic	Learning Outcomes	Assessment
Year 10		Introduction	Introduction to the course/ Practical challenges To know and explain key terminology	
	Term 1	Food, nutrition and health - nutrients	Students will learn the: ✓ Definition of protein• functions of protein in the body • main sources of protein in the diet, effects of a deficiency or excess of protein in the diet • amount of protein needed at different life stages. ✓ The definition of carbohydrate. The functions of carbohydrate in the diet. The main sources of carbohydrate. The effects of deficiency and excess of carbohydrate in diet. The amount of carbohydrate needed for everyday life. The importance of reducing the amount of free sugars in our diets today. ✓ the definition of dietary fibre • functions of dietary fibre • the different types of dietary fibre • the effect of excess and deficiency of dietary • the dietary reference values for fibre. • how to modify an existing recipe to reduce the amount of free sugar in the recipe and/or increase the amount of dietary fibre in the recipe. ✓ The definition of Fat. The functions of fat in the diet. The main sources of fat in the diet. The effects of deficiency and excess of fat in diet. The amount of fat needed for everyday life. The importance of reducing the amount of saturated fat in our diets today. ✓ Vitamins A, D, E & K. The functions of vitamins in the body. The main sources of vitamins in the body. The effect of excess and deficiency of vitamins in the diet The dietary reference values for the different vitamins needed every day	Formative assessment every lesson, low stakes knowledge checks for homework and throughout lessons. Peer and self-assessment opportunities throughout. There is a summative assessment for the end of each unit.

			✓ Water soluble vitamins B & C Students will learn The definition of vitamins B1, B2, B3, B9, B12 and C ✓ Students will learn about the minerals calcium, iron, salt and fluoride. The functions of each mineral in the body. The main sources of minerals in the body. The effect of excess and deficiency of different minerals in the diet The dietary reference values for the different minerals needed every day. ✓ The importance of good preparation and revision in advance of end of topic assessment. To practice answering different types of exam questions under examination conditions. To develop exam technique when answering different types of questions. To test knowledge and understanding of nutrition and the different nutrients in food.	
		Food, nutrition and health - Making informed choices for a varied and balanced diet	Students will learn: ✓ the current guidelines for a healthy diet eg eatwell plate. • nutritional needs for the following life stages: young children, teenagers, adults and the elderly. • how to plan a balanced meal for specific dietary groups: vegetarian and vegan, coeliac, lactose intolerant and high fibre diets.	
		Food, nutrition and health – Energy needs	Students will learn: ✓ factors which affect the BMR, such as age, gender and PAL. Their importance in achieving energy balance. • the percentage of recommended energy sources from nutrients: • protein 15% • fat 35% or less • carbohydrate 50% (of which 45% from starches, lactose in milk and fruit sugars and a maximum of 5% from free sugars).	

		Food, nutrition and health - How to carry out nutritional analysis	Students will learn: ✓ how to use current nutritional information and data eg food tables, nutritional analysis software to calculate energy and nutritional value.	
		Food, nutrition and health - Diet, nutrition and health	Students will learn ✓ how diet can affect health and how nutritional needs change in relation to: • obesity • cardiovascular health (coronary heart disease (CHD) and high blood pressure) • bone health (rickets and osteoporosis) • dental health • iron deficiency anaemia • Type 2 diabetes. ✓ the major diet related health risks	

	Term	Topic	Learning Outcomes	Assessment
Year 10		Food science – cooking food and heat transfer	Students will learn: ✓ That food is cooked to: • make food safe to eat • develop flavours • improve texture • improve shelf life • give variety in the diet. How preparation and cooking affect the appearance, colour, flavour, texture, smell and overall palatability of food. How heat is transferred to food through: • conduction • convection • radiation. ✓ how the selection of appropriate preparation and cooking methods can conserve or modify nutritive value or improve palatability: • water based: steaming, boiling, simmering, blanching, poaching, braising • dry methods: baking, roasting, grilling, dry frying • fat based: shallow frying, stir fry • how preparation and cooking affect the appearance, colour, flavour, texture, smell and overall palatability of food eg the use of marinades to denature protein.	Formative assessment every lesson, low stakes knowledge checks for homework and throughout lessons. Peer and self-assessment opportunities throughout. There is a summative assessment for the end of each unit.

	Term 2	Food science – functional and chemical properties of food	Students will learn: ✓ the working characteristics, functional and chemical properties of proteins and the scientific principles underlying protein denaturation, protein coagulation, gluten formation and foam formation when preparing and cooking food. ✓ the working characteristics, functional and chemical properties of carbohydrates and the scientific principles underlying gelatinisation, dextrinization and caramelisation when preparing and cooking food. ✓ the working characteristics, functional and chemical properties of fats and the scientific principles underlying shortening, aeration, plasticity and emulsification when preparing and cooking food. ✓ the scientific principles underlying enzymic browning and oxidation when preparing and cooking food. ✓ the working characteristics, functional and chemical properties of raising agents. The scientific principles underlying chemical, mechanical and biological raising agents when preparing and cooking food	
		Food safety – food spoilage and contamination	Students will learn: ✓ growth conditions for microorganisms: role of temperature, moisture, food and time • control of microorganism growth: temperature control, pH, water availability • high risk foods: ready to eat moist foods, usually high in protein that easily support the growth of pathogenic bacteria and do not require any further heat treatment or cooking • control of enzymic action: blanching of vegetables before freezing, use of acids to prevent enzymic browning. ✓ About the process of enzymic action: ripening of bananas, browning of some fruits • mould growth: eg on bread and cheese. Recognise the signs of mould	

			growth on foods • yeast action on fruits eg grapes, strawberries and tomatoes. ✓ the use of microorganisms in food production (moulds in the production of blue cheese • yeasts to raise bread • bacteria in yoghurt and cheese production)	
		Food safety – principles of food safety	Students will learn: ✓ The food safety principles when buying and storing food including temperature control: • freezing: -18°c • chilling: 0 to below 5°c • danger zone: 5 to 63°c • cooking: 75°c • reheating: 75°c • ambient storage • temperature danger zone • correct use of domestic fridges and freezers • date marks • 'best before' and 'use by' dates • covering foods. ✓ The food safety principles when preparing, cooking and serving food including: personal hygiene • clean work surfaces • separate raw and cooked foods and use of separate utensils • correct cooking times • appropriate temperature control including: defrosting and reheating • appropriate care with high risk foods • correct use of food temperature probes.	

	Term	Topic	Learning Outcomes	Assessment
Year 10		Food choices – factors affecting food choice	✓ To know and understand the following factors in relation to food choice: • physical activity level (PAL) • celebration/occasion • cost of food • preferences • enjoyment • food availability • healthy eating • income • lifestyles • seasonality • time of day • time available to prepare/ cook. Students must be able to cost recipes and make modifications.	Formative assessment every lesson, low stakes knowledge checks for homework and throughout lessons. Peer and self-assessment opportunities throughout. There is a summative assessment for the end of each unit.

	Term 3		✓ To select, modify and make recipes for different religions, cultures and dietary groups: o food choice linked to the following religions and cultures: Buddhism, Christianity, Hinduism, Islam, Judaism, Rastafarianism and Sikhism o food choice linked to the following ethical and moral beliefs: animal welfare, fairtrade, local produce, organic, Genetically Modified (GM) foods o food choice linked to food intolerances (gluten and lactose) and the following allergies: nuts, egg, milk, wheat, fish and shellfish. ✓ How information about food available to the consumer, including labelling and marketing, influences food choice.	
		Food choice – British and international cuisine	✓ Students will learn about the distinctive features and characteristics of cooking, the equipment and cooking methods used, the eating patterns, presentation styles and traditional and modern variations of recipes for food products from British tradition and two different cuisines.	
		Food choice – sensory evaluation	Students will learn about sensory testing methods and how taste receptors and olfactory systems work when tasting food. They will consider the importance of senses when making food choices: sight, taste, touch and aroma Students will carry out sensory testing in all its forms - preference tests: paired preference, hedonic. • discrimination tests: triangle. • grading tests: ranking, rating and profiling • how to set up a taste panel • controlled conditions required for sensory testing • evaluating how senses guide • evaluating a wide range of ingredients and food from Britain and other countries • how to test sensory qualities of a wide range of foods and combinations.	

CHURCH STRETTON SCHOOL	Department	Key stage 4

End of year assessment
This will include topics covered
Misconceptions will be addressed as part of the end of year assessment review process