



# Food Preparation and Nutrition Year 10

## Curriculum Intent

GCSE Food Preparation and Nutrition bears witness to the progression made in KS3. We aim to further develop our young chefs practical skills to begin to consider industry standards and enable them to learn and perfect complex cooking skills. Students are also introduced to extensive subject knowledge including nutrition and food science. This allows our students to become fully immersed in the understanding of Food, not only how to cook but why and how foods change when cooked for them to make independent informed choices when they cook and create. This course provides students with both the technical and theoretical skills and actively encourage them to develop lifelong skills enabling them to create food independently for the rest of their life.

## Terms 1-4 | Food Theory

### Students will learn:-

- Food, nutrition and health
- Food science
- Food safety
- Food choice
- Food provenance

### What does excellence look like?

Subject knowledge is gathered in theory lessons and further supported through activities, exam questions, resources and practical activities.

Practical skills are developed further through practical sessions

Examination skill set developed through lessons and practice questions

### How is homework used to enhance learning?

- Students are supported using resources made by staff and digital textbook.
- Power points
- Homework
- Differentiated homework.
- Differentiated activities
- Practice exam questions

### How will we assess impact?

- Assessment homework.
- Prelims
- Practice exam questions
- Differentiated activities.

### Knowledge, Understanding & Skills

- Macronutrients
- Protein
- Carbohydrates
- Fats
- Micronutrient
- Vitamins
- Minerals
- Water
- Nutritional needs and health
- Making informed choices for a varied and balanced diet.
- Energy needs
- How to carry out nutritional analysis
- Diet, nutrition and health
- Food Science
- Why food is cooked and how heat is transferred to food
- Selecting appropriate cooking methods
- Functional and chemical properties of food.
- Proteins (• protein denaturation • protein coagulation • gluten formation • foam formation.)
- Carbohydrates (• gelatinisation • dextrinization • caramelisation)
- Fats (shortening • aeration • plasticity , emulsification).
- Fruit and vegetables
- enzymic browning • oxidation.
- Raising agents
- chemical (baking powder, bicarbonate of soda, self- raising flours which produce carbon dioxide)
- mechanical (whisking, beating, folding, sieving, creaming and rubbing in – all incorporate air into the mixture)
- steam is produced when the water in any moist mixture reaches boiling point
- biological (yeast).
- Food spoilage and contamination
- Microorganisms and enzymes
- the growth conditions for microorganisms and enzymes and the control of food spoilage
- bacteria, yeasts and moulds are
- microorganisms
- high risk foods
- enzymes are biological
- catalysts usually made from protein.
- The signs of food spoilage
- Enzymic action
- mould growth
- yeast action.
- The use of microorganisms in food production.
- The different sources of bacterial contamination
- The main types of bacteria which cause food poisoning
- The main sources and methods of control of different food poisoning bacteria types



## Students will learn:-

- General practical skills
- Knife skills
- Preparing fruit and vegetables
- Use of the Cooker
- Use of equipment
- Cooking methods
- Prepare, combine and shape
- Sauce making
- Tenderise and marinate
- Dough
- Raising agents
- Setting Mixtures

## What does excellence look like?

Students know how to approach both NEA coursework, what is expected of them and how to access the top mark band.

Students can use subject specific terminology to display their understanding in order to effectively communicate their understanding.



## How is homework used to enhance learning?

- Students learn different skills through practical situations.
- Students are guided through new skills by demos.
- Students are aided by step by step resources.
- Textbook digital version – videos and step by step.

## How will we assess impact? (3D)

Assessments are carried out periodically throughout the term. Students are provided with assessment feedback in order to improve ready for GCSE final practical.

## Knowledge, understanding & Skills

- Students to carry out practical investigations
- In order to develop their practical skills knowledge.
- 3.1.1 General practical skills.
  - Weigh and measure
  - Prepare ingredients and equipment
  - Select and adjust cooking times
  - Test for readiness.
  - Judge and modify sensory properties
- 3.1.2 Knife Skills.
  - Fruit and vegetables
    - Bridge hold, claw grip, peel, slice, dice and cut into even size pieces (ie batons, julienne).
  - Meat, fish or alternatives
    - Fillet a chicken breast, portion a chicken, remove fat and rind, fillet fish, slice evenly and accurately: raw and cooked meat and fish or alternatives (such as tofu and halloumi cheese).
- ☑ Preparing fruit and vegetables
  - Mash, shred, scissor snip, scoop, crush, grate, peel, segment, de-skin, de-seed, blanch, shape, pipe, blend, juice and prepare garnishes whilst demonstrating the technical skills of controlling enzymic browning, spoilage and preventing food poisoning (wash and dry where appropriate).
- ☑ Using the cooker
  - Using the grill
    - Use a range of foods, such as vegetables, meat, fish or alternatives such as halloumi, seeds and nuts; char/grill or toast.
- Using the Oven
  - Baking, roasting, casseroles and/or tagines, braising.
- ☑ Use of equipment
  - Use of blender, food processor, mixer, pasta machine, microwave oven.
- ☑ Cooking methods
  - Water based using the hob including: Steaming, boiling and simmering; blanching; poaching.
  - Dry heat and fat based methods using the hob include: Dry frying, shallow frying, stir frying.
- ☑ Prepare, combine and shape
  - Roll, wrap, skewer, mix, coat, layer meat, fish and alternatives. Shape and bind wet mixtures (such as falafels, burgers, fish cakes or meatballs) whilst demonstrating the technical skill of preventing cross contamination and handling high risk foods correctly.
- ☑ Sauce Making
  - Starch based: Sauce demonstrating starch gelatinisation such as: roux, all in one, blended, infused velouté or béchamel. How starch/liquid ratios affect viscosity.
  - Reduction: Reduction sauce to show how evaporation concentrates flavour. Eg tomato pasta sauce, curry sauce, gravy, meat sauce (including meat alternatives such as mycoprotein and textured vegetable protein) to show how evaporation concentrates flavour and changes the viscosity of the sauce.
  - Emulsion: Make an emulsion sauce such as a salad dressing, demonstrating an understanding of how to stabilise an emulsion.
- ☑ Tenderise and marinate
  - How acids denature protein.
  - Marinades add flavour and moisture when preparing vegetables, meat, fish and alternatives.
- 3.1.10 Dough
  - Making a dough (bread, pastry, pasta) Use technical skills of shortening, gluten formation, fermentation (proving) for bread, pastry, pasta.
  - Shaping and finishing -Roll out pastry, use a pasta machine, line a flan ring, create layers (palmiers) proving and resting, glazing and finishing, such as pipe choux pastry, bread rolls, pasta, flat breads, pinwheels, pizza and calzone.
- ☑ Raising agents
  - Eggs as a raising agent
    - Create a gas-in-liquid foam, whisking egg whites, whisked sponge.
  - Chemical raising agents
    - The use of self raising flour, baking powder, bicarbonate of soda.
  - Steam as a raising agent
    - Use of steam in a mixture (choux pastry, batter).
  - Biological raising agent
    - Use of yeast in breadmaking.
- 3.1.11 Setting Mixtures
  - Removal of heat
    - Gelation: use a starch to set a mixture on chilling for layered desserts such as custard.
  - Use protein
    - Set a mixture on heating such as denatured and/or coagulated protein in eggs.

## International Opportunities

### Visits Programmes

- Local cuisine on all visits - cooking with exchange families in their homes, spending lunchtimes with exchange partners in schools, eating out at restaurants
- Traditional Lunch at Restaurant La Cabanya – Girona
- Halles de Paul Bocuse (Food Hall) – Lyon
- Lunch at traditional French restaurant – Lyon
- Traditional tea ceremony - China

### Within the curriculum

- Complete a Mediterranean cuisine project where they investigate the cuisine and culture of that area, choosing a dish to cook and present. They research the Mediterranean food pyramid for healthy eating.
- Learn about traditional British cuisines as part of the course, as well as the food from Italy and Morocco. This is studied in depth with practical examples of dishes that students complete, such as pasta, pasties.
- Produce a French patisserie practical where they learn to make Choux buns and profiteroles.
- Complete an investigation of various cooking methods is undertaken as part of the course, where students apply this to methods used in different cultures.
- Religious beliefs and how these influence different food choices are investigated and explored as part of cultural food choices.
- Explore food security and sustainability, thinking about worldwide impacts on our food production, especially global warming.
- Explore seasonal food and the different climates needed to grow produce from around the world.
- Explore Fairtrade products and the impact of this initiative on sustainable communities.

