

# Food Technology 5 Year Curriculum Plan

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Updated:

## Teaching and Learning Vision

*Knowledge is power. Information is liberating.*

**Kofi Annan**

At Smith's Wood Academy, we believe all students, whatever their background, are able to become **experts** in the disciplines that they study. Their expertise will be achieved through quality teaching and the dissemination of deep knowledge by highly skilled and knowledgeable subject experts. The Mastery approach to teaching will prevail – in every classroom, every lesson, every day.

Our students have the right to be introduced to **deep knowledge** and a **wealth of information** from the spectrum of subjects that they study. They will be introduced to, and understand, theories and principles that have influenced, continue to influence, and will influence in the future, the world in which they live. They will be prepared to fully engage in academic discussion about their learning.

This learning will secure a successful place in society for our students. They will go further than they ever thought possible.

## Teaching and Learning Vision for the Food Technology Department

*To promote healthy eating and drinking habits across the whole school community. To foster passion and success for the Food Technology and create opportunities for both pupils and staff to develop and master their culinary skills. To promote cultural awareness and tolerance through food production and testing.'*

We can turn every learner into a *Food Technologist*

At the end of Year 11 students in *Food Technology* will....

### Know and understand

- **The major commodity groups** – staple foods, fruits and vegetables, milk and dairy foods, meat fish, eggs, and other non- dairy sources of protein, foods and drinks high in sugar and fat.
- **The relationship between diet and health**- government healthy eating guidelines, the importance of healthy eating, eat well guide and diet related diseases as it relates to poor diet.
- **Nutritional and dietary needs of different groups of people**- dietary needs of children, toddlers, pre-schoolers, pregnant women, elderly and lactating women.
- **Understanding of the dietary needs of people with special dietary needs ad it relates to allergies**- lactose intolerance, coeliac, nut allergies.
- **Understanding of dietary reference values** – how to calculate and adapt recipes to ensure that DRV's of different groups are met during planning and preparation of food.
- **Understand the factors that affect the energy needs of individuals**- Be able to calculate the BMR and PAL of different groups. Know the unit for measuring energy. The effects of energy imbalance can have on health.
- **Nutrients**- function, types, food sources and deficiency diseases of all macro and micronutrients including water.
- **Food Provenance**- food sources production and farming techniques arguments for and against different farming techniques.
  1. Fishing- where and how fish is caught, sustainable fishing, classification of fish.
  2. Meat and poultry- farming techniques, intensive farming, free range, classification of meat and poultry.
  3. Cereals, fruits and vegetables- classification of fruits and vegetables, organic vs non-organic, locally and seasonal fruits and vegetables.
- **Food production and processing- primary** and secondary processing of flour, dairy products, bread and pasta.
- **Food preservation**- UHT, drying, smoking, acids, sugars and salts, CAP, MAP, AFD, cold temperature preservations.
- **Food security**- Moral, ethical, carbon foot print, sustainability, environmental factors issues affecting food production.
- **Technological development in food production**- Use of additives, fortifications, emerging foods (probiotics and prebiotics), and consumer issues surrounding pros and cons.
- **International cuisine**- production understanding of British cuisine and two other cuisines. understanding impact of religion, culture, cooking equipment on each cuisine.
- **Factors affecting food choice**-personal, medical, religious, moral, economics, social, ethical issues.
- **Food science**- reason why food is cooked.
  1. Heat transfer- conduction, convection and radiation.
  2. Working properties of food ( chemical and functional)- key vocabulary as it relates to changes that occur during cooking and production processing (carbohydrates, fats and oils, protein, fruits and vegetable, raising agents) Working characteristics of functional foods

- **Sensory analysis of foods**- using range of sensory testing panels (rating, ranking, profiling) and appropriate descriptive language.
- **Food Safety**- conditions and control of bacteria growth, signs of food spoilage
  1. Buying and storage of foods, preparation of foods.
  2. Cooking and serving of foods
  3. Types of bacteria
  4. High risk foods.
  5. Personal hygiene and safety.
- **Food Safety and the law** – consumer laws and regulations surrounding the handling and preparation of foods. Consumer rights purchasing of food products.

### Be able to demonstrate the following skills:

- **Knife skills**- in preparation of meat, fish and vegetables. Bridge and claw method, dice, slice, peel, chop, grate (julienne, batons).
- **Cooking methods/ competent use of cooker.**- demonstrate competently ability to prepare a variety of dishes using a range of cooking methods – steaming, boiling, frying, grilling, poaching, casseroles, roasting, braising.
- **Competently using a range of specialist equipment**- whisk, pastry cutters, dough machine, mixer, blender, fryers, food processors etc.
- **Sauce making**- understanding the process to make roux, curry, hollandaise, emulsion, gravies, infused, meat sauce, béchamel veloute.
- **Raising agents**- use of yeast, baking powder/soda, egg whites, and steam.
- **Set mixture**- layered desserts, coagulation, quiche, choux pastry.
- **Sensory analyse and adapt recipes**- adapt recipes throughout practical to improve taste texture and appearance.
- **Food preparation** - using a wide range of food commodities.
- **Food presentation**- portion control and garnishing of food products.
- **Weighing and measuring**- of liquids and solids
- **Test for readiness**- use temperature probe, skewer, knife, poke test, visual, colour and sound test.

## Have been exposed to the following texts

### **Books**

OCR GCSE Food Preparation & Nutrition by Val Fehners.

My revision notes OCR GCSE Food & Nutrition Anita Tull

Range of recipe books.

Professional Cookery by David Foskett, NEIL RIPPINGTON, Patricia Paskins

New Larousse Gastronomique

### **Website**

[www. BBC Bitesize](http://www.BBBC.com) (revision)

[www.Food Standards Agency.co.uk](http://www.FoodStandardsAgency.co.uk)

### **TV Programmes/ documentaries**

BBC- supermarket secrets

## Have been exposed to the following knowledge and theories that span beyond the GCSE specification

Professional Cookery by Book by David Foskett, NEIL RIPPINGTON, Patricia Paskins, and Steve

New Larousse Gastronomique

Indian Food: A Historical Companion by K. T. Achaya

## Developed their cultural and social capital through the following extra-curricular work

- Food clubs
- Competitions.
- Enterprise Days( breakfast and lunch mornings)
- Vegetarian Society visit and workshops.
- Royal Academy of Chefs visits and work shop.
- Trip to Birmingham indoor market research on fish, meat and fruits and vegetables.

## 5 Year Curriculum Plan

**Year 7 Food Technology at Smith's Wood Academy**

The Smith's Wood Year 7 Food Technology curriculum prepares all pupils to demonstrate effective and safe cooking skills by planning and preparing and cooking using a variety of food commodities, cooking techniques and equipment. Pupils should be able to by the end of year & understand the relationship between diet health and nutrition including effects of a poor diet.

**Year 7 Units of Study**
**Length of unit**

<b>Unit 1</b>	<b>Food Safety</b> <b>Topics covered:</b> Conditions for growth of bacteria- Food temperature zones Causes of food poisoning Personal hygiene rules Symptoms of food poisoning Rules for food hygiene	<b>2 lessons</b>
<b>Unit 2</b>	<b>Relationship between diet and health</b> <b>Topics covered:</b> Government healthy eating guidelines Food traffic light and eat well guide Diet related illness caused by poor diet Factors contribute to heart disease How to reduce risk of heart disease Diabetes- Type1 and Type 2 Reducing sugar in the diet. Increasing fruits and vegetables	<b>4 lessons</b>
<b>Unit 3</b>	<b>Macro nutrients (Carbohydrates &amp; Protein)</b> <b>Carbohydrates</b>	<b>10 lessons</b>

	<p><b>Topics covered :</b>          Function of carbohydrates          There are three main groups of carbohydrates          Starch- function          Food sources of starch          Different types of sugar          Food Sources of sugar          Excess carbohydrates in diet          Dietary fibre function.          Food sources of fibre.</p> <p><b>Protein</b>  <b>Topics covered :</b>          Function of protein-          High biological value protein (HBV) and low biological value protein (LBV).          Food sources of HBV protein          Low biological value protein-          Food sources of LBV protein          Complimentary protein-          Protein deficiency</p>	
<p>Unit 4</p>	<p><b>Macro nutrients (Fats)</b>  <b>Topics covered :</b>          Function of Fat          Saturated and unsaturated fats.          Food sources of saturated fats          Unsaturated Fats-          Monounsaturated fats          Polyunsaturated fats-          Essential fatty acids          Reducing fat in diet</p>	<p>4 lessons</p>
<p>Unit 5</p>	<p><b>Testing/ Assessment</b>          Pupils will an end of rotation test covering topics covered throughout rotation.</p>	<p>1 lessons</p>

Year 8 Food Technology at Smith's Wood Academy		
<p>The Smith's Wood Year 8 Food Technology curriculum prepares all pupils to demonstrate effective and safe cooking skills by planning and preparing and cooking using a variety of food commodities, cooking techniques and equipment.</p> <p>Pupils should be able to understand and articulate the factors that affect an individual's diet and health. Understand the economic, environmental ethical and socio- cultural influences on food availability, production processes and diet and health choices.</p> <p>Pupils should understand the nutritional needs of a variety of different groups and be able to plan and prepare meals that would meet the dieter reference values of these groups having an understanding of energy imbalance and related health issues.</p>		
Year 8 Units of Study		Length of unit
<b>Unit 1</b>	<p><b>Food Safety</b></p> <ul style="list-style-type: none"> <li>Conditions for growth of bacteria-</li> <li>Food temperature zones</li> <li>Causes of food poisoning</li> <li>Personal hygiene rules</li> <li>Symptoms of food poisoning</li> <li>Rules for food hygiene</li> </ul>	<b>2 lessons</b>
<b>Unit 2</b>	<p><b>Factors influencing food choices</b></p> <p><b>Topics covered:</b></p> <ul style="list-style-type: none"> <li>Factors affecting food choices.</li> <li>Personal, social and economic factors include</li> <li>Medical and health reasons.</li> <li>Marketing, promotions and advertising include</li> <li>Religious and cultural beliefs includes</li> <li>Ethical and moral beliefs include</li> </ul>	<b>6 lessons</b>
<b>Unit 3</b>	<p><b>Nutritional needs of different dietary groups</b></p> <p><b>Topics covered:</b></p> <ul style="list-style-type: none"> <li>Dietary needs of different life stages-</li> <li>Factors affecting dietary needs</li> </ul>	<b>6 lessons</b>



	Lowering sugar Lowering fat Lowering salt	
<b>Unit 4</b>	<b>Micronutrients ( Vitamin C, Iron and Vitamin D)</b> <b>Topics covered:</b> Vitamin C function Vitamin C food sources Deficiency disease Vitamin C Iron function Iron food sources. Deficiency disease Iron Vitamin D function Vitamin D food sources Deficiency disease Vitamin D Water function Signs of dehydration	<b>6 lessons</b>
<b>Unit 5</b>	<b>Testing/Assessment</b> Pupils will an end of rotation test covering topics covered throughout rotation.	<b>1 lessons</b>
<b>Year 9 Food Technology at Smith's Wood Academy</b>		
<p>The Smith's Wood Year 9 Food Technology curriculum prepares all pupils to demonstrate effective and safe cooking skills by planning and preparing and cooking using a variety of food commodities, cooking techniques and equipment.</p> <p>Pupils should be able to understand and demonstrate knowledge and understanding of functional and nutritional properties, sensory qualities and microbiological considerations when preparing, processing, storing, cooking and serving foods.</p> <p>Pupils should be able identify and explain the pros and cons of a variety of food production methods and impact on consumer choices</p>		
<b>Year 9 Units of Study</b>		<b>Length of unit</b>
<b>Unit 1</b>	<b>Food Safety</b> <b>Topics covered:</b>	<b>3 lessons</b>

	<p>Conditions for growth of bacteria-          Food temperature zones          Causes of food poisoning          Personal hygiene rules          Symptoms of food poisoning          Rules for food hygiene</p>	
<p>Unit 2</p>	<p><b>Food Provenance</b>  <b>Topics covered:</b>          Classification of cereals          Nutrients found in cereals          Draw and label diagram of cereal.          Classification of fruits          Classification of vegetables-          Disadvantage of locally produced fruits and vegetables          Classification of meat          Animal welfare in terms of food production          Egg production          Benefits of organic farming.          Red tractor food standards          Classification of fish          Fishing methods          Benefits of fish          Disadvantage of fish farming</p>	<p>14 lessons</p>
<p>Unit 3</p>	<p><b>Food Processing and production</b>  <b>Topics covered:</b>          Advantages and disadvantages of preserving foods          High temperature methods of preserving foods          Low temperature methods of preserving foods          Chemical method of preserving food          Modified atmospheric packaging and vacuum packaging          Advantages of cook chill foods          Reasons for increase in frozen foods          MILK          Varieties of milk</p>	<p>9 lessons</p>

	Primary processing of milk Different types of butter Different type of cream Cheese Process of cheese making Categories of cheese Wheat Different type of flour Structure of wheat	
Unit 4	<b>Food Security</b> <b>Topics covered:</b> Genetically modified foods. Carbon footprint Sustainable farming Organic Free range Eco footprint	3 lessons
Unit 5	<b>International Cuisine</b> <b>Topics covered:</b> Preparation of British and Italian dishes. Understanding of British and Italian cuisine common spices foods and cooking methods. Understanding of regional foods.	8 lessons
Unit 6	<b>Testing/Assessment</b>	1 lesson
<b>Year 10 Food Technology at Smith's Wood Academy</b>		
<p>The Smith's Wood Year 10 Food Technology curriculum prepares all pupils to demonstrate effective and safe cooking skills by planning and preparing and cooking using a variety of food commodities, cooking techniques and equipment. Demonstrate knowledge and understanding of functional and nutritional properties, sensory qualities and microbiological food safety considerations when preparing, processing, storing and serving food.</p> <p>Pupils should be able to explore ingredients and processes from different culinary traditions both British and international and use these cuisines to inspire them to modify and create new recipes.</p>		
<b>Year 10 Units of Study</b>		<b>Length of unit</b>

Unit 1	Food Safety and hygiene	3 lessons
Unit 2	Nutrition/ Nutrients/ diet and health	14 lessons
Unit 3	Food provenance/ Food commodity	12 lessons
Unit 4	Food security	3 lessons
Unit 5	Food processing and food production	5 lesson
Unit 6	International Cuisine	5 lessons

### Year 11 Food Technology at Smith's Wood Academy

The Smith's Wood Year 11 Food Technology curriculum prepares all pupils to demonstrate effective and safe cooking skills by planning and preparing and cooking using a variety of food commodities, cooking techniques and equipment. Demonstrate knowledge and understanding of functional and nutritional properties, sensory qualities and microbiological food safety considerations when preparing, processing, storing and serving food.

Pupils should be able to explore ingredients and processes from different culinary traditions both British and international and use these cuisines to inspire them to modify and create new recipes.

Pupils should have acquired the skills to test a range of dishes use their scientific knowledge to adapt recipes and manipulate the properties of ingredients and effectively complete both their investigative and food preparation task.

Pupils should be able to consolidate their learning and be able to successfully achieve their GCSE.

### Year 11 Units of Study

Length of unit

Unit 1	Food Safety	2 lessons
Unit 2	Food Science- Investigative task (CA)	10 lessons
Unit 3	Skills and presentation/ Food commodity and cuisines	8 lessons
Unit 4	Culinary traditions- Food Preparation Task (CA)	12 lessons
Unit 5	Revision	8 lessons

## 5 Year Curriculum Plan Overview

### Year 7

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
<b>Autumn Term 1</b> <b>Rotation 1</b>	Unit 1 Food Safety	Unit 1 Food Safety	Unit 2 Diet and Health	Unit 2 Diet and Health	Unit 2 Diet and Health	Unit 2 Diet and Health	Unit 3 Macro nutrients <b>carbohydrate</b>
<b>Autumn Term 2</b>	Unit 3 Macro nutrients <b>carbohydrate</b>	Unit 3 Macro nutrients <b>carbohydrate</b>	Unit 3 Macro nutrients <b>carbohydrate</b>	Unit 3 Macro nutrients <b>carbohydrate</b>	Unit 3 Macro nutrients <b>Protein</b>	Unit 3 Macro nutrients <b>Protein</b>	Unit 3 Macro nutrients <b>Protein</b>
<b>Spring Term 1</b>	Unit 4 Macro nutrients <b>Protein</b>	Unit 3 Macro nutrients <b>Protein</b>	Unit 3 Macro nutrients <b>Fat</b>	Unit 3 Macro nutrients <b>Fat</b>	Unit 3 Macro nutrients <b>Fat</b>	Unit 3 Macro nutrients <b>Fat</b>	<b>Unit 5 Assessment/ Testing</b>
<b>Spring Term 2</b> <b>Rotation 2</b>	Unit 1 Food Safety	Unit 1 Food Safety	Unit 2 Diet and Health	Unit 2 Diet and Health	Unit 2 Diet and Health	Unit 2 Diet and Health	Unit 3 Macro nutrients <b>carbohydrate</b>
<b>Summer Term 1</b>	Unit 3 Macro nutrients <b>carbohydrate</b>	Unit 3 Macro nutrients <b>carbohydrate</b>	Unit 3 Macro nutrients <b>carbohydrate</b>	Unit 3 Macro nutrients <b>carbohydrate</b>	Unit 3 Macro nutrients <b>Protein</b>	Unit 3 Macro nutrients <b>Protein</b>	Unit 3 Macro nutrients <b>Protein</b>
<b>Summer Term 2</b>	Unit 3 Macro nutrients <b>Protein</b>	Unit 3 Macro nutrients <b>Protein</b>	Unit 3 Macro nutrients <b>Fat</b>	Unit 3 Macro nutrients <b>Fat</b>	Unit 3 Macro nutrients <b>Fat</b>	Unit 3 Macro nutrients <b>Fat</b>	<b>Unit 5 Assessment/ Testing</b>

## Year 8

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
<b>Autumn Term 1</b> <b>Rotation 1</b>	Unit 1 Food Safety	Unit 1 Food Safety	Unit 2 Factors affecting food choice	Unit 2 Factors affecting food choice	Unit 2 Factors affecting food choice	Unit 2 Factors affecting food choice	Unit 2 Factors affecting food choice
<b>Autumn Term 2</b>	Unit 2 Factors affecting food choice	Unit 2 Factors affecting food choice	Unit 3 Micro nutrients <b>Vitamin C /Iron</b>	Unit 3 Micro nutrients <b>Vitamin C/Iron</b>	Unit 3 Micro nutrients <b>Vitamin C/Iron</b>	Unit 3 Micro nutrients <b>Vitamin D</b>	Unit 3 Micro nutrients <b>Vitamin D</b>
<b>Spring Term 1</b>	Unit 4 <b>Vitamin E&amp;K</b>	Unit 4 <b>Vitamin E&amp;K</b>	Unit 5 Dietary needs of different groups	Unit 5 Dietary needs of different groups	Unit 5 Dietary needs of different groups	Unit 5 Dietary needs of different groups	<b>Unit 5 Assessment/ Testing</b>
<b>Spring Term 2</b> <b>Rotation 2</b>	Unit 1 Food Safety	Unit 1 Food Safety	Unit 2 Factors affecting food choice	Unit 2 Factors affecting food choice	Unit 2 Factors affecting food choice	Unit 2 Factors affecting food choice	Unit 2 Factors affecting food choice
<b>Summer Term 1</b>	Unit 2 Factors affecting food choice	Unit 2 Factors affecting food choice	Unit 3 Micro nutrients Vitamin C /Iron	Unit 3 Micro nutrients Vitamin C /Iron	Unit 3 Micro nutrients Vitamin C /Iron	Unit 3 Micro nutrients Vitamin C /Iron	Unit 3 Micro nutrients Vitamin C /Iron
<b>Summer Term 2</b>	Unit 4 Vitamin E&K	Unit 4 Vitamin E&K	Unit 5 Dietary needs of different groups	Unit 5 Dietary needs of different groups	Unit 5 Dietary needs of different groups	Unit 5 Dietary needs of different groups	<b>Unit 5 Assessment/ Testing</b>

## Year 9

	<b>Week 1</b>	<b>Week 2</b>	<b>Week 3</b>	<b>Week 4</b>	<b>Week 5</b>	<b>Week 6</b>	<b>Week 7</b>
<b>Autumn Term 1</b>	Unit 1 Food Food hygiene and safety	Unit 1 Food Food hygiene and safety	Unit 1 Food Food hygiene and safety	Unit 2 Food Provenance	Unit 2 Food Provenance	Unit 2 Food Provenance	Unit 2 Food Provenance
<b>Autumn Term 2</b>	Unit 2 Food Provenance	Unit 2 Food Provenance	Unit 2 Food Provenance	Unit 2 Food Provenance	Unit 2 Food Provenance	Unit 3 Food Processing	Unit 3 Food Processing
<b>Spring Term 1</b>	Unit 4 Food Security	Unit 4 Food Security	Unit 4 Food Security	Unit 5 Food Security	Unit 4 Food Security	Unit 5 International Cuisine <b>(British)</b>	Unit 5 International Cuisine <b>(British)</b>
<b>Spring Term 2</b>	Unit 5 International Cuisine <b>(British)</b>	Unit 5 International Cuisine <b>(Italian)</b>	Unit 5 International Cuisine <b>(Italian)</b>	Unit 5 International Cuisine <b>(Italian)</b>	Unit 6 Factors Influencing food choices	Unit 6 Factors Influencing food choices	Unit 6 Factors Influencing food choices
<b>Summer Term 1</b>	Unit 6 Factors Influencing food choices	Unit 6 Factors Influencing food choices	Unit 6 Factors Influencing food choices	Unit 6 Factors Influencing food choices	Unit 7 Dietary needs of different groups	Unit 7 Dietary needs of different groups	Unit 7 Dietary needs of different groups
<b>Summer Term 2</b>	Unit 7 Dietary needs of different groups	Unit 7 Dietary needs of different groups	Unit 7 Dietary needs of different groups	Unit 7 Dietary needs of different groups	<b>Unit 8 Assessment/ Testing</b>		

## Year 10

	<b>Week 1</b>	<b>Week 2</b>	<b>Week 3</b>	<b>Week 4</b>	<b>Week 5</b>	<b>Week 6</b>	<b>Week 7</b>
<b>Autumn Term 1</b>	Unit 1 Relationship between diet and health	Unit 1 Relationship between diet and health	Unit 1 Nutrition and dietary groups.	Unit 1 Energy balance	Unit 2 Protein	Unit 2 Fat	Unit 2 Carbohydrates
<b>Autumn Term 2</b>	Unit 2 Vitamins and minerals	Unit 2 Food provenance	Unit 2 Food provenance	Unit 2 Food provenance	Unit 2 Food provenance	Unit 3 Food security	Unit 3 Food security
<b>Spring Term 1</b>	Unit 3 International Cuisines <b>French</b>	Unit 3 International Cuisines <b>Chinese</b>	Unit 3 International Cuisines <b>American</b>	Unit 3 International Cuisines <b>British</b>	Unit 3 International Cuisines <b>Indian</b>	Unit 4 Food commodity	Unit 4 Food commodity
<b>Spring Term 2</b>	Unit 4 Food commodity	Unit 4 Food Science	Unit 4 Food Science	Unit 5 Food Analysis	Unit 5 Food Analysis	Unit 6 Investigative task	Unit 6 Investigative task
<b>Summer Term 1</b>	Unit 6 Investigative task	Unit 7 Food processing and production	Unit 7 Food processing and production	Unit 7 Food processing and production	Unit 7 Food processing and production	Unit 8 Short task	Unit 8 Short task
<b>Summer Term 2</b>	Unit 8 Short task	Unit 8 Short task					



## Year 11

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
Autumn Term 1	Food Safety	Food Safety	Food Investigative Task	Food Investigative Task	Food Investigative Task	Food Investigative Task	Diet and Health
Autumn Term 2	Diet and Health	Diet and Health	Skills preparation and development <b>Knife skills</b>	Skills preparation and development <b>Cooking methods</b>	Skills preparation and development <b>Sauces</b>	Skills preparation and development <b>Cake making</b>	Skills preparation and development <b>Dough making</b>
Spring Term 1	Skills preparation and development	Technological developments in food production	Technological developments in food production	Technological developments in food production	International Cuisines <b>Mexican</b>	International Cuisines <b>Chinese</b>	International Cuisines <b>Spanish</b>
Spring Term 2	International Cuisines <b>Caribbean</b>	Practical CA task	Practical CA task	Practical CA task	Practical CA task	Revision exam	Revision exam
Summer Term 1	Revision exam	Revision exam					
Summer Term 2							