



## YEAR 12 FOOD TECHNOLOGY

### FOOD PRODUCT DEVELOPMENT

<b>Due Date:</b> Friday 26 <sup>st</sup> July 2018 Period 1 (Term 3 Week 1) – Theory Tuesday 31 <sup>st</sup> July 2018 Period 2 ( Term 3 Week 2) - Practical	<b>Assessment Name:</b> Food Product Development Design Project
<b>Mark:</b> /50	<b>Weighting:</b> 30 %

#### SYLLABUS OUTCOMES TO BE ASSESSED:

- H4.1 Develops, prepares and presents food using product development processes  
H5.1 Develops, realises and evaluates solutions to a range of food situations

#### DIRECTIVES TO BE ASSESSED:

**Develop** - to come gradually into existence or operation

**Prepare** – make (something) ready for use or consideration

**Present** – show or offer (something) for others to scrutinize or consider

**Evaluate** – make a judgement based on criteria; determine the value of

#### TASK DESCRIPTION:

You are on the Research and Development (R&D) Team of a company (your choice) within the Food Manufacturing Industry and have the task of developing a new food product (either new-to-the-world or a line extension) that will extend market share and that can be sold nationally.

Using the steps in the Food Product Development Process below, **develop**, **realise** and **evaluate** a solution to the design brief above and then **develop**, **prepare** and **present** chosen solution.

1. SWOT Analysis (8 marks)
2. Idea Generation and Screening (4 marks)
3. Market Research (10 marks)
4. Product Specifications (4 marks)
5. Feasibility Study (5 marks)
6. Production Process Development (5 marks)
7. **Develop** and **prepare** prototype (2 marks)
8. **Testing** and **evaluation** of prototype (2 marks)
9. **Prepare** and **Present** meal to panel (10 marks)

#### ASSESSMENT CRITERIA – STUDENT CHECKLIST:

You will be assessed on your ability to:

- Have you chosen a company within the Food Manufacturing Industry?
- Have you completed a detailed SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis for your company?
- Idea Generation and Screening – have you come up with a minimum of 2 ideas?
- Idea Generation and Screening – have you identified advantages and disadvantages of each idea?
- Idea Generation and Screening – Have you chosen the best possible solution to the design brief?
- Market Research – Have you identified your target market and distributed a market research survey to at least 5 people in this target?
- Market Research – Have you evaluated your product in terms of the responses and listed any modifications that may be made to your product?
- Product Specifications – have you produced a product specification table for your product?

Check your assessment booklet for the PHS Assessment Policy

- Feasibility study – have you completed both a financial and technical feasibility for your product?
- Production Process Development – have you completed a Flow Process Chart indicating all steps required in production of your product?
- Production Process Development – is your Flow Process Chart in the correct format, using the correct symbols and does it clearly identify all quality control points?
- Develop and prepare prototype – have you made your product at home and included photographs?
- Testing and evaluation of prototype – have you completed a sensory evaluation of your product, describing appearance, odour and taste?
- Testing and evaluation of prototype – have you listed any modifications that may be made to your final product from this evaluation?
- Prepare and Present meal to panel – have you included your final recipe in your folio?
- Prepare and present meal to panel – have you got all your ingredients ready for your practical (Period 1)
- Prepare and present meal to panel – have you got answers prepared for any questions the panel may ask?

## MARKING GUIDELINES

<b>SWOT Analysis Guideline</b>	<b>Mark/Grade</b>
<ul style="list-style-type: none"> <li>- Develops, realises and evaluates solutions to a range of food situations by conducting an outstanding SWOT Analysis for their chosen company</li> <li>- Explicit use of subject specific terminology</li> </ul>	7-8
<ul style="list-style-type: none"> <li>- Develops, realises and evaluates solutions to a range of food situations by conducting a sound SWOT Analysis for their chosen company</li> <li>- Continued use of subject specific terminology</li> </ul>	5-6
<ul style="list-style-type: none"> <li>- Develops, realises and evaluates solutions to a range of food situations by conducting a basic SWOT Analysis for their chosen company</li> <li>- Basic subject specific terminology used</li> </ul>	3-4
<ul style="list-style-type: none"> <li>- Develops, realises and evaluates solutions to a range of food situations by conducting a limited SWOT Analysis for their chosen company</li> </ul>	1-2
<ul style="list-style-type: none"> <li>- Section not attempted</li> </ul>	0
<b>Idea Generation and Screening Guideline</b>	
<ul style="list-style-type: none"> <li>- Develops, realises and evaluates solutions to a range of food situations by producing 2 outstanding detailed ideas for new food products, identifying advantages and disadvantages of each and then selecting the best possible solution to the design brief</li> <li>- Explicit use of subject specific terminology</li> </ul>	4
<ul style="list-style-type: none"> <li>- Develops, realises and evaluates solutions to a range of food situations by producing 2 detailed ideas for new food products, identifying some advantages and disadvantages of each and then selecting a solution</li> <li>- Continued use of subject specific terminology</li> </ul>	3
<ul style="list-style-type: none"> <li>- Develops, realises and evaluates solutions to a range of food situations by producing 1 detailed idea OR 2 basic ideas for new food products, identifying some advantages and/or disadvantages of each and then selecting a solution</li> <li>- Some use of subject specific terminology</li> </ul>	2
<ul style="list-style-type: none"> <li>- Develops, realises and evaluates solutions to a range of food situations by producing 1 idea for a new food products then selecting a solution</li> </ul>	1
<ul style="list-style-type: none"> <li>- Section not attempted</li> </ul>	0

<b>Market Research Guideline</b>	
<ul style="list-style-type: none"> <li>- Outstandingly develops, realises and evaluates solutions to a range of food situations by identifying a suitable target market for the new food product, producing an outstanding market survey related to their product and distributing to at least 5 people and then listing any modifications to the new food product that came from these results</li> <li>- Explicit use of subject specific terminology</li> </ul>	8-10
<ul style="list-style-type: none"> <li>- Highly develops, realises and evaluates solutions to a range of food situations by identifying a target market for the new food product, producing a market survey related to their product and distributing to some people and then listing any modifications to the new food product that came from these results</li> </ul>	5-7
<ul style="list-style-type: none"> <li>- Soundly develops, realises and evaluates solutions to a range of food situations by identifying a target market for the new food product, producing a market survey related to their product and/or listing any modifications to the new food product that came from these results</li> </ul>	3-4
<ul style="list-style-type: none"> <li>- Basically develops, realises and evaluates solutions to a range of food situations by identifying a target market for the new food product and/or producing a market survey</li> </ul>	1-2
<ul style="list-style-type: none"> <li>- Section not attempted</li> </ul>	0
<b>Product Specifications Guideline</b>	
<ul style="list-style-type: none"> <li>- Develops, realises and evaluates solutions to a range of food situations by producing an outstanding product specifications table for the new food product</li> <li>- Explicit use of subject specific terminology</li> </ul>	4
<ul style="list-style-type: none"> <li>- Develops, realises and evaluates solutions to a range of food situations by producing a highly detailed product specifications table for the new food product</li> <li>- Continued use of subject specific terminology</li> </ul>	3
<ul style="list-style-type: none"> <li>- Develops, realises and evaluates solutions to a range of food situations by producing a basic product specifications table for the new food product</li> <li>- Basic use of subject specific terminology</li> </ul>	2
<ul style="list-style-type: none"> <li>- Develops, realises and evaluates solutions to a range of food situations by producing a limited product specifications table for the new food product</li> </ul>	1
<ul style="list-style-type: none"> <li>- Section not attempted</li> </ul>	0
<b>Feasibility Study Guideline</b>	
<ul style="list-style-type: none"> <li>- Develops, realises and evaluates solutions to a range of food situations by producing an outstandingly detailed financial and technical feasibility study for their company and new food product</li> <li>- Explicit use of subject specific terminology</li> </ul>	5
<ul style="list-style-type: none"> <li>- Develops, realises and evaluates solutions to a range of food situations by producing highly detailed financial and technical feasibility study for their company and new food product</li> <li>- Continued use of subject specific terminology</li> </ul>	4
<ul style="list-style-type: none"> <li>- Develops, realises and evaluates solutions to a range of food situations by producing a sound detailed financial and technical feasibility study for their company and new food product</li> <li>- Some use of subject specific terminology</li> </ul>	3
<ul style="list-style-type: none"> <li>- Develops, realises and evaluates solutions to a range of food situations by producing a detailed financial OR technical feasibility study for their company and new food product OR by producing a basic financial and technical feasibility for the company and new food product</li> <li>- Basic use of subject specific terminology</li> </ul>	2
<ul style="list-style-type: none"> <li>- Develops, realises and evaluates solutions to a range of food situations by producing a limited financial or technical feasibility study for their company and new food product</li> </ul>	1
<ul style="list-style-type: none"> <li>- Section not completed</li> </ul>	0

<b>Production Process Development</b>	
<ul style="list-style-type: none"> <li>- Develops, realises and evaluates solutions to a range of food situations by producing an outstanding flow process chart for their new food product, identifying all Critical Control Points and using correct format for the chart</li> <li>- Explicit use of subject specific terminology</li> </ul>	5
<ul style="list-style-type: none"> <li>- Develops, realises and evaluates solutions to a range of food situations by producing a highly detailed flow process chart for their new food product, identifying Critical Control Points and using correct format for the chart</li> <li>- Continued use of subject specific terminology</li> </ul>	4
<ul style="list-style-type: none"> <li>- Develops, realises and evaluates solutions to a range of food situations by producing a sound process chart for their new food product and identifies some Critical Control Points</li> <li>- Some use of subject specific terminology</li> </ul>	3
<ul style="list-style-type: none"> <li>- Develops, realises and evaluates solutions to a range of food situations by producing a basic process chart for their new food product</li> <li>- Basic use of subject specific terminology</li> </ul>	2
<ul style="list-style-type: none"> <li>- Develops, realises and evaluates solutions to a range of food situations by producing a limited process chart for their new food product</li> </ul>	1
<ul style="list-style-type: none"> <li>- Section not attempted</li> </ul>	0
<b>Develop and Prepare Prototype Guideline</b>	
<ul style="list-style-type: none"> <li>- Develops, prepares and presents food using product development processes by producing a prototype of the product at home and including at least 3 pictures of the experiment</li> </ul>	2
<ul style="list-style-type: none"> <li>- Develops, prepares and presents food using product development processes by producing a prototype of the product at home and including 1-2 pictures of the experiment</li> </ul>	1
<ul style="list-style-type: none"> <li>- Section not attempted</li> </ul>	0
<b>Testing and Evaluation of Prototype Guideline</b>	
<ul style="list-style-type: none"> <li>- Develops, realises and evaluates solutions to a range of food situations by completing an outstanding sensory evaluation (appearance, colour and odour) and then making appropriate modifications from this</li> <li>- Explicit use of subject specific terminology</li> </ul>	2
<ul style="list-style-type: none"> <li>- Develops, realises and evaluates solutions to a range of food situations by completing a sensory evaluation (appearance, colour and odour) and then making modifications from this</li> <li>- Some use of subject specific terminology</li> </ul>	1
<ul style="list-style-type: none"> <li>- Section not attempted</li> </ul>	0
<b>Prepare and Present Meal to Panel Guideline</b>	
<ul style="list-style-type: none"> <li>- Develops, prepares and presents food using product development processes by producing their new food product in the time period allocated, using outstanding preparing and presentation skills and effectively answering any questions posed by the panel</li> </ul>	8-10
<ul style="list-style-type: none"> <li>- Develops, prepares and presents food using product development processes by producing their new food product in the time period allocated, using high preparing and presentation skills and answering any questions posed by the panel</li> </ul>	5-7
<ul style="list-style-type: none"> <li>- Develops, prepares and presents food using product development processes by producing their new food product in the time period allocated, using sound preparing and presentation skills and answering most questions posed by the panel</li> </ul>	2-4
<ul style="list-style-type: none"> <li>- Develops, prepares and presents food using product development processes by producing their new food product, using basic preparing and presentation skills and answering some questions posed by the panel</li> </ul>	1
<ul style="list-style-type: none"> <li>- Section not attempted</li> </ul>	0

