COURSE OUTLINE – MYP YEAR 5 DESIGN – FOODS & NUTRITION

Course Overview:

Foods and Nutrition 10 builds on the concepts developed in Foods and Nutrition 9. Students will continue to work in unit groups to complete cooking labs, clean-up and reflections. Students will expand on the concepts of food safety, food preparation techniques, food systems and factors that influence availability and choice learned previously. Students will complete a herbs and spices project that goes through the IB Design Cycle twice.
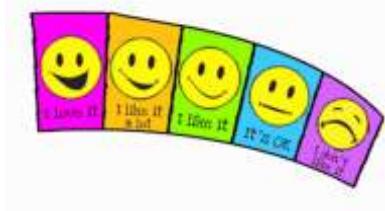
Learning:

Through engaging with this course, students should UNDERSTAND…

Consumer needs and preferences inform food production and preparation.	Social, ethical, and sustainability considerations impact design.	Complex tasks require different technologies and tools at different stages.

Through engaging with this course, students will KNOW…

Statement of Inquiry	Concepts	Unit Title/Topic
Designs are developed through understanding functions of the supplies and considering our available resources.	Development, Resources	Herbs and Spices in Cooking

Through engaging with this course, students will DO…

CURRICULAR COMPETENCIES	EXAMPLES
Understanding context	• Observe and research the context of a meal preparation task or process
Defining	• Identify and analyze points of view for a chosen meal design task or process • Identify potential consumers and contexts • Identify criteria for success, intended impact, and any constraints • Identify the physical capacities and limitations of workspaces
Ideating	• Engage in appropriate risk taking to creatively respond to challenges • Analyze impacts of competing social, ethical, economic, and sustainability factors on food choices and prep • Choose an idea to pursue, using sources of inspiration and information • Maintain an open mind about potentially viable ideas
Prototyping	• Select and combine appropriate levels of form, scale, and detail for prototyping • Experiment with a variety of tools, ingredients, and processes to create and refine food products • Evaluate a variety of materials for effective use and potential for reuse, recycling, and biodegradability
Testing	• Identify sources of feedback • Develop appropriate tests for the prototype • Use feedback to make appropriate changes
Making	• Make a step-by-step plan for production • Create food products, working individually or collaboratively, and making changes as needed • Use food materials in ways that minimize waste • Identify and use appropriate tools, technologies, materials, and processes for production
Sharing	• Decide on how and with whom to share prepared food products • Critically evaluate the success of meals, and explain how design ideas contribute to the individual, family, community, and environment • Assess their ability to work effectively both as individuals and collaboratively

Through this course, students will develop the following Approaches to Learning skills…

Below are some examples of how we develop ATL skills in Design:

ATL Skill Category	Examples of Skills
Thinking skills	Interpret data gained from scientific investigations
Social skills	Practice giving feedback on the design of experimental methods
Communication skills	Use appropriate visual representations of data based on purpose and audience skills
Self-management skills	Structure information appropriately in laboratory investigation reports
Research skills	Make connections between scientific research and related moral, ethical, social, economic, political, cultural or environmental factors

Assessment:

Throughout this course, students will demonstrate their learning…

The MYP Design course will focus on developing skills related to 4 criteria based objectives.	Formative assessment is assessment *as* learning, or assessment *for* learning. **Formative assessments could include;**	Summative assessment is assessment *of* learning. **Summative assessments could include;**
A: Inquiring and Analyzing	Using food safety principles during labs	Herbs and spices project
B: Developing Ideas	Adjusting ingredients to suit preferences during labs, experimenting with different equipment for cooking	Herbs and spices project
C: Creating the Solution	Creating products during cooking labs	Herbs and spices project
D: Evaluating	Recipe tracker reflections, verbal group reflections after labs	Herbs and spices project

Academic Honesty and Personal Integrity

The faculty at Carson Graham expects our students to complete academic and nonacademic work that is authentic and respectful of intellectual property. All students are expected to adhere to the school's Policy for Academic Integrity. Ignorance of the standards related to academic honesty and student integrity is not an excuse for dishonesty, plagiarism and malpractice. You are expected to familiarize yourself with the policy.

https://www.sd44.ca/school/carson/About/schoolpolicies/Documents/Carson%20Graham%20Academic%20Honesty%20Policy%20reviewed%20December%202018.pdf

Grade Descriptors:

Grade 7

Produces high-quality, frequently innovative design solutions through the application of the design cycle. Communicates comprehensive, nuanced understanding of design concepts and contexts through independent and detailed work. Consistently demonstrates sophisticated critical and creative thinking to inform research methods and to refine selected solutions. Frequently transfers knowledge and applies skills, with independence and expertise, to complex real-world issues.

Grade 6

Produces high-quality, occasionally innovative design solutions through the application of the design cycle. Communicates extensive understanding of design concepts and contexts through independent and detailed work. Demonstrates critical and creative thinking to inform research methods and to refine selected solutions, frequently with sophistication. Transfers knowledge and applies skills, often with independence, to real-world issues.

Grade 5

Produces generally high-quality design solutions through the application of the design cycle. Communicates good understanding of design concepts and contexts. Demonstrates critical and creative thinking to inform research methods and to refine selected solutions, sometimes with sophistication. Usually transfers knowledge and applies skills, with some independence, to real-world issues.

Grade 4

Produces good-quality design solutions through the application of the design cycle. Communicates basic understanding of design concepts and contexts, with few misunderstandings and minor gaps. Often demonstrates critical and creative thinking to inform research methods and to refine selected solutions. Transfers some knowledge and applies some skills in familiar situations, but requires support in unfamiliar situations.

Grade 3

Produces design solutions of an acceptable quality that generally follow the design cycle. Communicates basic understanding of design concepts and contexts in the work with occasional significant misunderstandings or gaps. Begins to demonstrate some critical and creative thinking to inform research methods and to refine selected solutions. Begins to transfer knowledge and apply skills, requiring support even in familiar situations.

Grade 2

Produces work of limited quality. Communicates limited understanding of some design concepts and contexts. Demonstrates limited evidence of critical or creative thinking. Limited evidence of transfer of knowledge or application of skills.

Grade 1

Produces work of a very limited quality. Conveys many significant misunderstandings or lacks understanding of most design concepts and contexts. Very rarely demonstrates critical or creative thinking. Very inflexible, rarely shows evidence of knowledge or skills.

Assessment Rubrics:

Grade 10

Criterion A: Inquiring and analysing

Achievement level	Level descriptor
0	The student does not reach a standard described by any of the descriptors below.
1-2	The student: • **states** the need for a solution to a problem for a specified client/target audience • **develops** a basic design brief, which **states** the **findings** of relevant research.
3-4	• **outlines** the need for a solution to a problem for a specified client/target audience • **outlines** a research plan, which **identifies** primary and secondary research needed to **develop** a solution to the problem, **with some guidance** • **analyses one** existing product that inspires a solution to the problem • **develops** a design brief, which **outlines** the analysis of relevant research.
5-6	• **explains** the need for a solution to a problem for a specified client/target audience • **constructs** a research plan, which **identifies** and **prioritizes** primary and secondary research needed to **develop** a solution to the problem, **with some guidance** • **analyses a range of** existing products that inspire a solution to the problem • **develops** a design brief, which **explains** the analysis of relevant research.
7-8	• **explains** and **justifies** the need for a solution to a problem for a client/ target audience • **constructs** a **detailed** research plan, which **identifies** and **prioritizes** the primary and secondary research needed to **develop** a solution to the problem independently • **analyses a range of** existing products that inspire a solution to the problem in detail • **develops** a **detailed** design brief, which **summarizes** the analysis of relevant research.

Criterion B: Developing ideas

Achievement level	Level descriptor
0	The student does not reach a standard described by any of the descriptors below.
1-2	The student: • **lists some basic** design specifications for the design of a solution • **presents one** design, which can be interpreted by others • **creates** incomplete planning drawings/diagrams.
3-4	• **lists some** design specifications, which relate to the success criteria for the design of a solution • **presents a few** feasible designs, using an appropriate medium(s) **or** annotation, which can be interpreted by others • **justifies** the selection of the chosen design with reference to the design specification • **creates** planning drawings/diagrams or **lists** requirements for the creation of the chosen solution.
5-6	• **develops** design specifications, which **outline** the success criteria for the design of a solution • **develops a range of** feasible design ideas, using an appropriate medium(s) **and** annotation, which can be interpreted by others • **presents** the chosen design and **justifies** its selection with reference to the design specification • **develops accurate** planning drawings/diagrams and **lists** requirements for the creation of the chosen solution.
7-8	• **develops detailed** design specifications, which **explain** the success criteria for the design of a solution based on the analysis of the research • **develops a range of** feasible design ideas, using an appropriate medium(s) **and detailed** annotation, which can be **correctly** interpreted by others • **presents** the chosen design and **justifies fully and critically** its selection with **detailed** reference to the design specification • **develops accurate and detailed** planning drawings/diagrams and **outlines** requirements for the creation of the chosen solution.

Criterion C: Creating the solution

Achievement level	Level descriptor
0	The student does not reach a standard described by any of the descriptors below.
1-2	The student: • **demonstrates minimal** technical skills when making the solution • **Creates** the solution, which functions **poorly** and is presented **in an incomplete form**.
3-4	The student: • **constructs a plan** that contains some production details, resulting in peers having difficulty following the plan • **demonstrates satisfactory** technical skills when making the solution • **creates** the solution, which **partially** functions and is **adequately** presented • **outlines** changes made to the chosen design and plan when making the solution.
5-6	The student: • **constructs a logical plan**, which considers time and resources, sufficient for peers to be able to follow to create the solution • **demonstrates competent** technical skills when making the solution • **creates** the solution, which functions **as intended** and is presented **appropriately** • **describes** changes made to the chosen design and plan when making the solution.
7-8	The student: • **constructs a detailed and logical plan**, which **describes** the efficient use of time and resources, sufficient for peers to be able to follow to create the solution • **demonstrates excellent** technical skills when making the solution. • follows the plan to **create** the solution, which functions **as intended** and is presented **appropriately** • fully **justifies** changes made to the chosen design and plan when making the solution.

Criterion D: Evaluating

Achievement level	Level descriptor
0	The student does not reach a standard described by any of the descriptors below.
1-2	The student: • **designs a** testing **method**, which is used to measure the success of the solution • **states** the success of the solution.
3-4	The student: • **designs a relevant** testing **method**, which generates data, to measure the success of the solution • **outlines** the success of the solution against the design specification based on **relevant** product testing • **outlines** how the solution could be improved • **outlines** the impact of the solution on the client/target audience.
5-6	The student: • **designs relevant** testing **methods**, which generate data, to measure the success of the solution • **explains** the success of the solution against the design specification based on **relevant** product testing • **describes** how the solution could be improved • **explains** the impact of the solution on the client/target audience, **with guidance**.
7-8	The student: • **designs detailed and relevant** testing **methods**, which generate data, to measure the success of the solution • critically **evaluates** the success of the solution against the design specification based on **authentic** product testing • **explains** how the solution could be improved • **explains** the impact of the product on the client/target audience.