



Ministry of Education

Area of Learning: APPLIED DESIGN, SKILLS, AND TECHNOLOGIES — Specialized Studies in Food

Grade 12

SPECIALIZED STUDIES IN FOOD 12

Description

Specialized Studies in Food 12 is designed for students who are interested in learning more about a particular cuisine and/or cooking methodology. The course allows students to delve deeply into a selected specialized area of focus as they pursue the learning standards. For example, an area of focus could include traditional food preparation techniques of a local First Peoples community or the design and baking of customized specialty cakes and pastries.



BIG IDEAS

Creativity and flavour can enhance food product design and service.

Culinary design interests require the evaluation and refinement of skills.

Tools and technologies can be adapted for specific purposes.

Learning Standards

Curricular Competencies	Content
<p><i>Students are expected to be able to do the following:</i></p> <p>Applied Design</p> <p><i>Understanding context</i></p> <ul style="list-style-type: none">• Observe and research the context of a recipe preparation task and/or process, including clientele and type of service <p><i>Defining</i></p> <ul style="list-style-type: none">• Identify potential consumers or customers for a chosen design opportunity• Identify criteria for success, constraints, and possible unintended negative consequences• Prioritize the steps needed to complete the task• Sequence the steps needed to safely organize the workspace and select tools and equipment• Anticipate and/or address challenges• Evaluate the physical capacities and limitations of the workspace <p><i>Ideating</i></p> <ul style="list-style-type: none">• Take creative risks in generating ideas and add to others' ideas in ways that enhance them• Analyze and screen ideas and recipes against criteria and constraints, and prioritize them for prototyping• Identify and apply existing, new, and emerging tools, technologies, and systems for a given task• Critically evaluate how competing social, ethical, economic, and sustainability considerations impact choices of food products, techniques, and equipment	<p><i>Students are expected to know the following:</i></p> <ul style="list-style-type: none">• specialized recipe design opportunities• food preparation and methods for selected specialized cuisine• best practices in recipe development and preparation• artistic elements of the culinary arts• food science in recipe development, including characteristics, properties, and functions of ingredients and substitutions• advancements in ingredients and tools• food trends and how they develop• social, economic, ethical, and environmental effects of food production, purchasing, preparation, and disposal• ethics of cultural appropriation• interpersonal and consultation skills, including ways to interact with consumers and customers



Learning Standards (continued)

Curricular Competencies	Content
<p>Prototyping</p> <ul style="list-style-type: none">Identify, critique, and use a variety of sources of inspiration and informationSelect and combine appropriate levels of form, scale, and detail for prototypingExperiment with a variety of tools, ingredients, and processes to create and refine food productsCompare, select, and use techniques that facilitate a given task or process <p>Testing</p> <ul style="list-style-type: none">Identify and communicate with sources of feedbackUse an appropriate test to determine the success of the dish, technique, or skillEvaluate and apply critiques to design and make changes <p>Making</p> <ul style="list-style-type: none">Identify appropriate tools, technologies, food sources, processes, cost implications, and time needed for productionCreate food product, incorporating feedback from self, others, and prototype testingShare their progress while making to gather feedback <p>Sharing</p> <ul style="list-style-type: none">Decide how and with whom to share finished productCritically reflect on their design thinking and processes, and identify new design goalsAssess their ability to work effectively both individually and collaboratively, including their ability to share and maintain an efficient co-operative workspaceIdentify and analyze new design possibilities, including how they or others might build on their concept <p>Applied Skills</p> <ul style="list-style-type: none">Apply safety procedures for themselves, co-workers, and consumers in both physical and digital environmentsIdentify and assess skills needed for design interests, and develop specific plans to learn or refine them over time	



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Learning Standards (continued)

Curricular Competencies	Content
<p>Applied Technologies</p> <ul style="list-style-type: none">Explore existing, new, and emerging tools, technologies, and systems to evaluate suitability for their design interestsEvaluate impacts, including unintended negative consequences, of choices made about technology useAnalyze the role technologies play in societal changeExamine how cultural beliefs, values, and ethical positions affect the development and use of technologies on a national and global level	

Curricular Competencies – Elaborations

- **clientele:** for example, students or adults?
- **type of service:** for example, buffet or à la carte? formal or informal event?
- **constraints:** limiting factors, such as available technologies and resources, expense, space, materials, time, environmental impact
- **Prioritize the steps:** consider what has to happen first and what needs to be done before going onto the next steps in order to complete a recipe or service
- **challenges:** for example, figure out meaning of new culinary terms, food and personal safety precautions, and equipment needed and how to properly operate
- **Prototyping:** testing the steps or ingredients needed to create a food product, or creating test samples of a food product
- **sources of inspiration:** may include personal experiences, exploration of First Peoples perspectives and knowledge, the natural environment, places, cultural influences, social media, professionals
- **information:** for example, professionals; First Nations, Métis, or Inuit community experts; secondary sources; collective pools of knowledge in communities and collaborative atmospheres
- **techniques that facilitate:** For example, when is it of greater value to employ estimation or precision measurement, or use a convenience form of a food product?
- **sources of feedback:** may include peers; users; First Nations, Métis, or Inuit community experts; other experts and professionals both online and offline
- **appropriate test:** for example, when to taste test, appropriate people to test, suitable product standards
- **Share:** may include tasting by others, giving away, or marketing and selling
- **safety procedures:** including food safety and sanitation, health, digital literacy
- **technologies:** tools that extend human capabilities

Content – Elaborations

- **best practices:** for example:
 - planning balanced and flavourful cuisine
 - limiting salt and sugar when building flavour
 - including fresh and seasonal produce when possible
 - providing interesting alternatives to address dietary restrictions
- **artistic elements:** consider:
 - the art of preparing, cooking, and presenting meals to enhance the dining experience
 - complimentary and contrasting colours, textures, and flavours
 - use of negative space on a plate, height, forms and shapes, lines and focal points
- **food science:** for example, pH involved in fermentation; molecular gastronomy; antibacterial qualities involved in smoking meat; gluten development; substitution for allergies, dietary restrictions, or health
- **substitutions:** for gluten-free, lactose-free, and sugar-free cooking; vegetarian cooking; low sodium diets
- **advancements in ingredients and tools:** for example, molecular gastronomy, freeze-drying, immersion circulators, sous vide, smoking, curing, fermentation
- **effects:** for example, land and water use, food miles, workers' rights, food security, health, affordability, food waste
- **cultural appropriation:** using or sharing a cultural motif, theme, "voice," image, knowledge, story, practices, or recipes without permission or without appropriate context or in a way that may misrepresent the real experience of the people from whose culture it is drawn
- **interpersonal and consultation skills:** for example, professional communications and collaboration