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

#### Grade 11

### BIG IDEAS

- **Services and products can be designed through consultation and collaboration.**
- **Personal design interests require the evaluation and refinement of skills.**
- **Tools and technologies can be adapted for specific purposes.**

#### Learning Standards

**Curricular Competencies**

*Students are expected to be able to do the following:*

**Applied Design**

*Understanding context*
- Observe and research the context of a meal and/or recipe preparation task or process

*Defining*
- Identify potential users or consumers for a chosen meal or recipe design opportunity
- Identify criteria for success, **constraints**, and possible unintended negative consequences
- Examine the physical capacities and limitations of the workspace

*Ideating*
- Take creative risks in generating ideas and add to others' ideas in ways that enhance them
- Screen ideas against criteria and constraints, and prioritize them for prototyping
- Critically evaluate how competing social, ethical, economic, and sustainability considerations impact choices of food products, techniques, and equipment

*Prototyping*
- Identify, critique, and use a variety of **sources of inspiration** and information
- 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
- Compare, select, and use **techniques that facilitate** a given task or process

**Content**

*Students are expected to know the following:*

- meal and recipe design opportunities
- components of recipe development and modification, including
  - ingredients
  - functions
  - proportions
  - temperatures
  - preparation methods
- issues involved with **food security**, including causes and impacts of **food recalls**
- **factors** involved in the creation of international and regional food guides
- **First Peoples food guides**
- ethics of **cultural appropriation**
- **food labelling** roles and responsibilities of Canadian government agencies and food companies
- **food promotion and marketing strategies** and their impact on **specific groups** of people
### Curricular Competencies

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<tr>
<th>Testing</th>
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<tr>
<td>Identify and communicate with <strong>sources of feedback</strong></td>
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<td>Develop <strong>appropriate tests</strong> of the prototype</td>
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<td>Apply critiques to design and make changes</td>
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<tr>
<th>Making</th>
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<tr>
<td>Identify appropriate tools, technologies, food sources, processes, cost implications, and time needed for production</td>
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<td>Create food product, incorporating feedback from self, others, and prototype testing</td>
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<td><strong>Share</strong> progress while making to gather feedback</td>
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<th>Sharing</th>
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<td>Decide how and with whom to share finished product</td>
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<td>Critically reflect on their design thinking and processes, and identify new design goals</td>
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<td>Assess their ability to work effectively both individually and collaboratively, including their ability to share and maintain an efficient co-operative workspace</td>
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<td>Identify and analyze new design possibilities, including how they or others might build on their concept</td>
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<th>Applied Skills</th>
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<tr>
<td>Apply <strong>safety procedures</strong> for themselves, co-workers, and consumers in both physical and digital environments</td>
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<td>Identify and assess skills needed for design interests, and develop specific plans to learn or refine them over time</td>
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<th>Applied Technologies</th>
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<td>Explore existing, new, and emerging tools, <strong>technologies</strong>, and systems to evaluate suitability for their design interests</td>
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<td>Evaluate impacts, including unintended negative consequences, of choices made about technology use</td>
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<td>Analyze the role technologies play in societal change</td>
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<td>Examine how cultural beliefs, values, and ethical positions affect the development and use of technologies on a national and global level</td>
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### Curricular Competencies – Elaborations

- **constraints:** limiting factors, such as availability of technologies and resources, expense, space, materials, time, environmental impact
- **Prototyping:** for example, 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:** may include 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 to estimate versus when to use precise measurement, or when to 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 tests:** 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

- **food security:** access to safe and nutritionally sound food
- **food recalls:** past and/or present, local and/or global
- **factors:** for example, why food guides are created, types of foods included, influences on decision making, new nutritional information
- **First Peoples food guides:** for example, Canada's Food Guide for First Nations, Inuit, and Métis
- **cultural appropriation:** using or sharing a cultural motif, theme, “voice,” image, knowledge, story, recipe, or practice 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
- **food labelling:** for example, regulations, nutrition facts, health claims, terminology, standards of composition, ingredients, calories, allergies, preservatives
- **food promotion and marketing strategies:** including social media, print, television, product placement
- **specific groups:** for example, age groups, cultural groups, groups with different activity levels, niche markets