



8794

VEGETABLES, FUNGI,
STARCHES, AND FARINACEOUS
PRODUCTS (11C)

30S/30E/30M

A Culinary Arts Course

8794: VEGETABLES, FUNGI, STARCHES, AND FARINACEOUS PRODUCTS (11C)

30S/30E/30M

Course Description

This course is intended for students wishing to pursue the Culinary Arts. Curriculum content focuses on the theory behind and preparation of vegetables, fruits, potatoes, pasta, rice, and other grains and farinaceous products.

Goal 1: Describe and apply appropriate **sanitation, health, and safety** practices as they relate to the culinary arts.

GLO 1.1: Demonstrate appropriate **personal hygiene** practices.

- SLO 11C.1.1.1: Define terminology associated with personal hygiene and hygienic practices. (A7.1)
 - SLO 11C.1.1.2: Describe the procedures used for handwashing. (A7.10)
 - SLO 11C.1.1.3: Practise personal hygiene and safe health standards.
 - SLO 11C.1.1.4: Adhere to the professional standards of dress, hygiene, and grooming.
 - SLO 11C.1.1.5: Identify and interpret codes, regulations, and federal, provincial/territorial, municipal requirements pertaining to kitchen sanitation and safe food-handling practices. (A7.2)
 - SLO 11C.1.1.6: Describe the procedures used to ensure personal hygiene and clean apparel. (A7.9)
 - SLO 11C.1.1.7: Identify and interpret food health regulations and guidelines associated with the practice of personal hygiene. (A7.7)
 - SLO 11C.1.1.8: Identify and interpret regulations and guidelines associated with wearing personal items. (A7.8)
-

GLO 1.2: Demonstrate safe **food-handling** practices.

- SLO 11C.1.2.1: Demonstrate safe food-handling practices in regard to vegetables, fungi, starches, and farinaceous products.
 - SLO 11C.1.2.2: Identify common food allergies found in vegetables, fungi, starches, and farinaceous products, and determine appropriate substitutions.
 - SLO 11C.1.2.3: Describe the safe storage of stock equipment in service vehicles. (A3.11)
 - SLO 11C.1.2.4: Identify types of food-borne illnesses, their causes, and preventative measures. (A7.11)
 - SLO 11C.1.2.5: Identify types of food contamination, their causes, and preventative measures. (A7.12)
 - SLO 11C.1.2.6: Identify proper food-handling and storage techniques. (A7.13)
-

GLO 1.3: Create and maintain a **safe and sanitary work environment**.

- SLO 11C.1.3.1: Create and maintain a safe work environment when working with vegetables, fungi, starches, and farinaceous products.
- SLO 11C.1.3.2: Identify regulations pertinent to care and cleanliness in the work area. (A3.3)
- SLO 11C.1.3.3: Identify regulations relevant to the safe use of chemicals. (A3.4)
- SLO 11C.1.3.4: Identify ergonomics. (A3.5)
- SLO 11C.1.3.5: Identify, recognize, and control hazards. (A3.6, A3.10)
- SLO 11C.1.3.6: Identify the hazards associated with working in a confined space and the preparation required to work safely in a confined space. (A3.7) (TSA 20)
- SLO 11C.1.3.7: Describe safety practices and precautions related to the use of kitchen tools and equipment. (A6.2)
- SLO 11C.1.3.8: Describe the importance of emergency planning procedures.
- SLO 11C.1.3.9: Describe and follow substance abuse regulations.
- SLO 11C.1.3.10: Identify and outline workplace fire safety principles. (A3.8) (TSA 19)
- SLO 11C.1.3.11: Discuss the role of Workplace Safety and Health, and the procedures to follow in case of an incident (e.g., slips and falls, improper lifting, etc.).

- SLO 11C.1.3.12: Describe the principles of the Workplace Hazardous Materials Information System (WHMIS) and identify the safety requirements as they apply to the culinary arts. (A3.9) (TSA 13)
- SLO 11C.1.3.13: Describe how the Workers Compensation Act relates to the profession of chef.
- SLO 11C.1.3.14: Describe procedures for dealing with burns and cuts.
- SLO 11C.1.3.15: Identify the safety principles for working on and around electrical equipment. (A3.6)(TSA 18)
- SLO 11C.1.3.16: Describe the three government levels of food/health inspection and the area each level controls.
- SLO 11C.1.3.17: Describe the Hazard Analysis Critical Control Points (HACCP) System and its use in food-service operations. (A7.14)
- SLO 11C.1.3.18: Demonstrate proper kitchen sanitation, personal hygiene, and food-handling and storage practices. (A7.15)
- SLO 11C.1.3.19: Identify safety and health requirements. (A3.1)
- SLO 11C.1.3.20: Describe and use appropriate personal protective equipment (PPE) (e.g., gloves, safety glasses or goggles, hearing protection, respirator mask) and identify PPE and procedures related to PPE. (A3.2) (TSA 16)
- SLO 11C.1.3.21: Demonstrate knowledge of safety equipment such as fire extinguisher, first aid kit, and eyewash station. (A3.8)
- SLO 11C.1.3.22: Identify sanitizing products and describe their applications and procedures for use. (A7.3)
- SLO 11C.1.3.23: Describe the three-sink method of sanitization. (A7.4)
- SLO 11C.1.3.24: Describe the procedures used to disassemble and assemble kitchen tools and equipment and their accessories for sanitizing purposes. (A7.5)
- SLO 11C.1.3.25: Describe the procedures used to maintain a sanitary food-service operation. (A7.6)
-

GLO 1.4: Demonstrate knowledge of the **Trade Safety Awareness Manual** (<www.gov.mb.ca/tce/apprent/apprentice/trade_safety/>).

No applicable SLOs.

Goal 2: Demonstrate the safe and appropriate **operation, cleaning, and maintenance of kitchen equipment and cooking utensils.**

GLO 2.1: Demonstrate the safe and appropriate **operation, cleaning, and maintenance** of kitchen equipment and cooking utensils.

- SLO 11C.2.1.1: Demonstrate the safe and appropriate operation and/or use of kitchen equipment, containers, and cooking utensils used in the preparation of vegetables, fungi, starches, and farinaceous products.
 - SLO 11C.2.1.2: Demonstrate the safe and appropriate cleaning and maintenance of the equipment and utensils used in the preparation of vegetables, fungi, starches, and farinaceous products.
 - SLO 11C.2.1.3: Define terminology associated with kitchen tools and equipment. (A6.1)
 - SLO 11C.2.1.4: Identify types of knives and describe their characteristics, applications, and procedures for use. (A6.3)
 - SLO 11C.2.1.5: Identify the tools used to sharpen and hone knives, and describe their applications and procedures for use. (A6.4)
 - SLO 11C.2.1.6: Describe the procedures used to inspect and store knives. (A6.5)
 - SLO 11C.2.1.7: Demonstrate the safe and appropriate use of knives.
 - SLO 11C.2.1.8: Identify types of pots and pans, and describe their characteristics, applications, and procedures for use. (A6.6)
 - SLO 11C.2.1.9: Describe the procedures used to inspect and store pots and pans. (A6.7)
 - SLO 11C.2.1.10: Identify types of utensils and describe their characteristics, applications, and procedures for use. (A6.8)
 - SLO 11C.2.1.11: Describe the procedures used to inspect and store utensils. (A6.9)
 - SLO 11C.2.1.12: Identify types of equipment and appliances, and describe their accessories, applications, and procedures for use. (A6.10)
 - SLO 11C.2.1.13: Describe the procedures used to inspect, maintain, and store equipment and appliances. (A6.11)
 - SLO 11C.2.1.14: Demonstrate proper use of kitchen tools and equipment and their maintenance and procedures for use. (A6.12)
-

Goal 3: Demonstrate the appropriate **receiving, handling, quality assurance, storage, pre-preparation, preparation, and presentation** of different types of food and beverage.

GLO 3.1: Demonstrate the appropriate **receiving, handling, quality assurance, and storage** of different types of food and beverage.

- SLO 11C.3.1.1: Demonstrate the procedures used to receive, inspect, handle, and store vegetables, fungi, starches, and farinaceous products. (A11.7, C1.11)
 - SLO 11C.3.1.2: Describe the procedures used to handle and store potatoes. (C2.7)
 - SLO 11C.3.1.3: Describe the procedures used to handle and store fresh and cooked pasta and dumplings. (D2.11)
 - SLO 11C.3.1.4: Describe the procedures used to label, date, initial, and rotate stock. (A11.5)
 - SLO 11C.3.1.5: Describe the procedures for handling and storing pulses, grains, and nuts. (D1.8)
-

GLO 3.2: Demonstrate the appropriate **pre-preparation (mise en place), preparation, and presentation** of different types of food and beverage.

- SLO 11C.3.2.1: Prepare vegetables using moist heat, dry heat, and combination cooking methods.
- SLO 11C.3.2.2: Prepare, cook, and store/serve vegetables to retain colour, texture, and nutritional value.
- SLO 11C.3.2.3: Demonstrate the reconstitution of vegetables, fungi, starches, and farinaceous products.
- SLO 11C.3.2.4: Describe and demonstrate various vegetable cuts and their uses.
- SLO 11C.3.2.5: Identify classical cuts and describe their characteristics, applications, and associated procedures. (C1.4)
- SLO 11C.3.2.6: Describe the procedures used to prepare vegetables and fungi. (C1.8)
- SLO 11C.3.2.7: Describe plating and finishing techniques. (C1.9)
- SLO 11C.3.2.8: Demonstrate the procedures used to prepare vegetables and fungi. (C1.11)
- SLO 11C.3.2.9: Describe and demonstrate the procedures used to prepare potatoes. (C2.5, C2.8)
- SLO 11C.3.2.10: Describe plating and finishing techniques for potatoes. (C2.6)

- SLO 11C.3.2.11: Describe and demonstrate the procedures used to prepare pulses, grains, and nuts. (D1.5, D1.9)
- SLO 11C.3.2.12: Describe plating and finishing techniques for pulses, grains, and nuts. (D1.7)
- SLO 11C.3.2.13: Describe procedures used to process fresh pasta. (D2.4)
- SLO 11C.3.2.14: Describe and demonstrate procedures used to prepare pasta and dumplings. (D2.5, D2.6, D2.12)
- SLO 11C.3.2.15: Describe the procedures used to assemble pasta dishes. (D2.9)
- SLO 11C.3.2.16: Determine doneness of vegetables, fungi, starches, and farinaceous products. (D2.7)
- SLO 11C.3.2.17: Describe plating and finishing techniques for vegetables, fungi, starches, and farinaceous products. (D2.10, G3.5)

Goal 4: Demonstrate an understanding of **food, ingredients, recipes, menus, food costing, and nutrition.**

GLO 4.1: Demonstrate an understanding of **the characteristics of foods and ingredients**, and how these characteristics are used to prepare food, and design recipes and menus.

- SLO 11C.4.1.1: Define terminology associated with vegetables and fungi. (C1.1)
- SLO 11C.4.1.2: Identify types of vegetables, and describe their characteristics and applications. (C1.2)
- SLO 11C.4.1.3: Identify types of fungi, and describe their characteristics and applications. (C1.3)
- SLO 11C.4.1.4: Identify factors that affect flavour, colour, texture, and nutrients of vegetables. (C1.5)
- SLO 11C.4.1.5: Identify the factors to consider when selecting vegetables and fungi. (C1.6)
- SLO 11C.4.1.6: Identify market forms (pre-prepared and packaged) of vegetables and fungi, and describe their characteristics and applications. (C1.7)
- SLO 11C.4.1.7: Define the terminology associated with potatoes. (C2.1)
- SLO 11C.4.1.8: Identify classifications and types of potatoes, and describe their characteristics and applications. (C2.2)
- SLO 11C.4.1.9: Identify market forms (pre-prepared and packaged) of potatoes. (C2.3)
- SLO 11C.4.1.10: Identify the factors to consider when selecting potatoes. (C2.4)
- SLO 11C.4.1.11: Define terminology associated with pulses, grains, and nuts. (D1.1)

- SLO 11C.4.1.12: Identify types of pulses, and describe their characteristics and applications. (D1.2)
 - SLO 11C.4.1.13: Identify types of rice and grains, and describe their characteristics and applications. (D1.3)
 - SLO 11C.4.1.14: Identify types of nuts, and describe their characteristics and applications. (D1.4)
 - SLO 11C.4.1.15: Define terminology associated with pasta and dumplings. (D2.2)
 - SLO 11C.4.1.16: Identify classifications and types of pasta, and describe their characteristics and applications. (D2.3)
 - SLO 11C.4.1.17: Identify types of dumplings, and describe their characteristics and applications. (D2.4)
 - SLO 11C.4.1.18: Describe the characteristics indicating proper doneness of vegetables, fungi, starches, and farinaceous products.
-

GLO 4.2: Demonstrate an understanding of recipes, menus, and food costing.

- SLO 11C.4.2.1: Demonstrate how to follow a recipe for creating dishes with vegetables, fungi, starches, and farinaceous products.
-

GLO 4.3: Demonstrate an understanding of nutrition.

- SLO 11C.4.3.1: Describe the nutritional components of vegetables, fungi, starches, and farinaceous products, and their place in a healthy lifestyle.
-

Goal 5: Apply the transferable, **cross-curricular** knowledge and skills, as they relate to the culinary arts (chemistry, English language arts, food science, French, nutrition, mathematics, etc.).

GLO 5.1: Read, interpret, and communicate information.

- SLO 11C.5.1.1: Read and follow manufacturers' directions and recipes related to the preparation of patisserie and baking.
 - SLO 11C.5.1.2: Identify effective communication practices. (A4.1)
 - SLO 11C.5.1.3: Identify the types of communication methods and equipment, and describe their applications. (A4.2)
 - SLO 11C.5.1.4: Describe the importance of effective verbal, non-verbal, and written communication with customers, suppliers, and employees. (A4.3)
 - SLO 11C.5.1.5: Communicate effectively using verbal and non-verbal techniques. (A4.4)
 - SLO 11C.5.1.6: Demonstrate effective communication principles. (A4.5)
-

GLO 5.2: Apply **mathematics** knowledge and skills relevant to the culinary arts.

- SLO 11C.5.2.1: Convert total yield/ratio and portion sizes of recipes for vegetables, fungi, starches, and farinaceous products.
 - SLO 11C.5.2.2: Demonstrate the proficient use of fractions, ratios, decimals, and percentages.
 - SLO 11C.5.2.3: Demonstrate the proficient conversion between the metric and standard (or imperial) systems of measurement.
 - SLO 11C.5.2.4: Demonstrate the established formula to increase and decrease ingredients in a recipe to ensure the product's success.
 - SLO 11C.5.2.5: Describe the methods used to determine yields of pulses, grains, and nuts. (D1.6)
 - SLO 11C.5.2.6: Describe the methods used to determine yields of pasta and dumplings. (D2.7, D2.8)
-

GLO 5.3: Apply **chemistry** knowledge and skills relevant to the culinary arts.

- SLO 11C.5.3.1: Demonstrate the use of acids and bases to manipulate the texture, colour, and nutritional levels of fruits or vegetables.
-

Goal 6: Demonstrate awareness of **sustainability** as it pertains to the culinary arts.

GLO 6.1: Describe the culinary arts industry's **sustainability** practices and impact on the environment.

- SLO 11C.6.1.1: Identify the waste produced in a culinary arts facility.
 - SLO 11C.6.1.2: Demonstrate the disposal and recycling of waste.
 - SLO 11C.6.1.3: Rotate stock in a way to minimize waste (e.g., FIFO—the first one in is the first one out).
 - SLO 11C.6.1.4: Identify and locate facilities for recycling and waste disposal.
-

Goal 7: Demonstrate awareness of the **ethical and legal standards** that pertain to the culinary arts.

GLO 7.1: Identify and follow the **ethical and legal standards** that pertain to the culinary arts.

No applicable SLOs.

Goal 8: Demonstrate the **employability skills** required in the culinary arts.

GLO 8.1: Demonstrate fundamental **employability skills**.

SLO 11C.8.1.1: Demonstrate employability skills (e.g., being prepared for work on time, setting up workstations, staying on task, accepting responsibility for their actions, and so on).

SLO 11C.8.1.2: Demonstrate professional dress code.

SLO 11C.8.1.3: Demonstrate the skills required to work as a member of a team.

SLO 11C.8.1.4: Demonstrate initiative in performing tasks.

Goal 9: Demonstrate an understanding of **working conditions and career opportunities** in the culinary arts.

GLO 9.1: Demonstrate an understanding of **working conditions and career opportunities** in the culinary arts.

No applicable SLOs.

Goal 10: Demonstrate an understanding of the **evolution and technological progression of, and the emerging trends in** the culinary arts.

GLO 10.1: Demonstrate an understanding of the **evolution and technical progression of, and the emerging trends in** the culinary arts.

SLO 11C.10.1.1: Demonstrate an understanding of the evolution and technical progression of, and the emerging trends in vegetables, fungi, starches, and farinaceous products.
