8794 VEGETABLES AND STARCHES (11C)

30S/30E/30M

A Culinary Arts Course

8794 Vegetables and Starches (11C) 30S/30E/30M

Course Description

This course focuses on the theory behind and preparation of vegetables, fruits, potatoes, pasta, rice, and other grains and farinaceous products.

Goal 1: Demonstrate an understanding of, and adherence to, safety, personal hygiene, sanitation, and food safety procedures.

GLO 1.1: Demonstrate an understanding of, and adherence to, safety, personal hygiene, and sanitation practices.

SLO 11C.1.1.1	Describe and adhere to professional standards of dress, personal hygiene, and grooming.
SLO 11C.1.1.2	Create and maintain a safe and sanitary work environment.
SLO 11C.1.1.3	Demonstrate an understanding of emergency procedures.
SLO 11C.1.1.4	Demonstrate an understanding of, and comply with, personal protective equipment (PPE) and procedures.
SLO 11C.1.1.5	Demonstrate an adherence to ergonomic principles.
SLO 11C.1.1.6	Demonstrate an understanding of, and comply with, WHMIS guidelines.

GLO 1.2: Demonstrate an understanding of, and adherence to, **food safety** procedures.

SLO 11C.1.2.1	Describe the procedures used to disassemble and assemble kitchen tools, equipment, and their accessories for sanitizing purposes. (A3.4)
SLO 11C.1.2.2	Demonstrate proper kitchen sanitation, personal hygiene, and food handling and storage practices. (A3.8)
	cleanliness
	preventing cross-contamination
	maintaining foods at safe temperatures
SLO 11C.1.2.3	Demonstrate an understanding of food allergies and intolerances.
SLO 11C.1.2.4	Identify and eliminate hazards associated with food

allergies and intolerances.

- **Goal 2:** Demonstrate an understanding of kitchen **tools** and **equipment**, along with their **use**, **cleaning**, and **maintenance**.
 - **GLO 2.1:** Demonstrate an understanding of kitchen **tools** and **equipment**, along with their **use**, **cleaning**, and **maintenance**.
 - SLO 11C.2.1.1 Demonstrate an understanding of kitchen tools and equipment.
 - SLO 11C.2.1.2 Demonstrate the use, cleaning, and maintenance of kitchen tools and equipment.
 - SLO 11C.2.1.3 Demonstrate the knowledge and skills required to make a variety of classical knife cuts.
- **Goal 3:** Demonstrate the **receiving**, **handling**, **quality assurance**, and **storage** of different types of food and beverages.
 - **GLO 3.1:** Demonstrate the **receiving**, **handling**, **quality assurance**, and **storage** of different types of food and beverages.
 - SLO 11C.3.1.1 Demonstrate the receiving, handling, quality assurance, and storage of different types of food and beverages.
 - SLO 11C.3.1.2 Perform the procedures used to receive, inspect, and store goods. (A7.6)
- **Goal 4:** Demonstrate the **pre-preparation** (mise en place), **preparation**, and **presentation** of different types of food and beverage.
 - **GLO 4.1:** Demonstrate the **pre-preparation** (mise en place), **preparation**, and **presentation** of different types of food and beverage.
 - SLO 11C.4.1.1 Explain the principles of heat transfer. (A8.2)
 - conduction
 - convection
 - radiation
 - induction
 - chemical process of cooking
 - SLO 11C.4.1.2 Describe and demonstrate methods used to cook foods and describe their associated procedures. (A8.3)
 - dry
 - moist
 - combination

	for doneness of foods and describe their associated procedures. (A8.4)
	probe thermometer
	visual inspection
SLO 11C.4.1.4	Identify methods of flavour enhancement and their applications. (A8.5)
	seasonings
	flavourings
SLO 11C.4.1.5	Identify basic kitchen practices, food quality indicators, and finishing techniques. (A8.6)
	finishing techniques
	holding foods
	plating techniques
	■ re-thermalization
	food quality indicators
	visual inspection
	tasting
	finishing techniques
	plating
	presentation
SLO 11C.4.1.6	Demonstrate the skills required to evaluate the doneness of food items.
SLO 11C.4.1.7	Differentiate between seasoning and flavouring, and determine which to use with particular food items.
SLO 11C.4.1.8	Demonstrate the knowledge and skills required to retain the colour, texture, and nutritional value of vegetables during cooking.
A11 Pastas and	l Noodles (7 hours)
SLO 11C.4.1.9	Define terminology associated with dry pastas and noodles. (A11.1)
SLO 11C.4.1.10	Identify and describe classifications and types of dry pastas and noodles, and their characteristics and applications. (A11.2)
SLO 11C.4.1.11	Describe the procedures used to handle and store dry pastas and noodles. (A11.3)

Describe and demonstrate methods used to check

SLO 11C.4.1.3

- SLO 11C.4.1.12 Perform the procedures used to prepare dry pastas and noodles. (A11.4)
 - yield
 - doneness
 - finishing
 - assemble
- SLO 11C.4.1.13 Perform the procedures used to prepare dry pastas and noodles. (A11.5)
 - yield
 - doneness
 - finishing
 - assemble

A16 Fruits and Vegetables I (21 hours)

- SLO 11C.4.14 Define terminology associated with vegetables. (A16.1)
- SLO 11C.4.15 Identify and describe the classifications of vegetables, and their characteristics and applications. (A16.2)
 - vegetables
 - roots and tubers
 - seeds and pods
 - fungi
 - squash
 - stem
 - leafy
- SLO 11C.4.16 Identify and describe the factors to consider when selecting vegetables. (A16.3)
 - characteristics
 - applications
 - local
 - season
 - freshness
 - storage life
 - certified organic
 - processed
 - classical cuts (knife skills)
 - preparation procedures

SLO 11C.4.17	Describe the procedures used to handle and store vegetables. (A16.4)	
SLO 11C.4.18	Identify factors that affect flavour, colour, texture, and nutrients of vegetables. (A16.5)	
	cooking process	
	acids/alkalis	
	water amounts	
	size and cut	
SLO 11C.4.19	Perform the procedures to prepare potatoes. (A16.7)	
	cooking methods	
	finishing	
SLO 11C.4.20	Identify and describe the market forms (pre-prepared and packaged) of vegetables, and describe their characteristics and applications. (A16.8)	
SLO 11C.4.21	Perform the procedures used to prepare vegetables. (A16.10)	
	cooking methods	
	finishing	
A17 Potatoes (14 hours)	
SLO 11C.4.22	Define terminology associated with potatoes. (A17.1)	
SLO 11C.4.22 SLO 11C.4.23	Define terminology associated with potatoes. (A17.1) Identify and describe the classifications and types of potatoes and their characteristics and applications. (A17.2)	
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- SLO 11C.4.26 Describe and demonstrate the procedures used to prepare potatoes. (A17.5)
 - baking
 - roasting
 - pan frying
 - steaming
 - boiling
 - pureeing
 - finishing and taste
- SLO 11C.4.27 Perform the procedures used to prepare potatoes. (A17.6)
 - baking
 - roasting
 - pan frying
 - steaming
 - boiling
 - pureeing
 - finishing and taste

A18 Grains, Pulses, Seeds, and Nuts (14 hours)

- SLO 11C.4.28 Define terminology associated with grains, pulses, seeds, and nuts. (A18.1)
- SLO 11C.4.29 Identify and describe types of grains, pulses, seeds, and nuts, and their characteristics and applications. (A18.2)
 - nutritional considerations
 - dustainability
- SLO 11C.4.30 Describe the procedures used to handle and store grains, pulses, seeds, and nuts. (A18.3)
- SLO 11C.4.31 Describe and demonstrate the procedures used to prepare grains, pulses, seeds, and nuts. (A18.4)
 - cooking method
 - yield
 - ratios
 - doneness
 - finishing
- SLO 11C.4.32 Identify market forms (pre-prepared and packaged) of grains, pulses, seeds, and nuts. (A18.5)

SLO 11C.4.33	Perform the procedures used to prepare grains, pulses, seeds, and nuts. (A18.6)
	cooking method
	yield
	ratios
	doneness
	finishing
SLO 11C.4.1.34	Demonstrate an understanding of the terminology associated with fresh pastas and noodles.
SLO 11C.4.1.35	Demonstrate an understanding of the classifications and types of fresh pastas and noodles, and their characteristics and applications.
SLO 11C.4.1.36	Demonstrate the knowledge and skills required to prepare and process fresh pasta dough.
SLO 11C.4.1.37	Demonstrate an understanding of the procedures used to handle and store fresh pastas and noodles.
SLO 11C.4.1.38	Demonstrate the ability to prepare fresh pastas and noodles.
SLO 11C.4.1.39	Demonstrate the ability to prepare vegetables using different cooking methods.
SLO 11C.4.1.40	Demonstrate the knowledge and skills required to reconstitute dry or dehydrated food products.
Demonstrate a	an understanding of food ingredients

Goal 5: Demonstrate an understanding of **food**, **ingredients**, **recipes**, **menus**, **food costing**, and **nutrition**.

- **GLO 5.1:** Demonstrate an understanding of the **characteristics of foods and ingredients**, and how knowledge of these characteristics is taken into consideration in preparing food, and designing recipes and menus.
 - SLO 11C.5.1.1 Demonstrate an understanding of the characteristics of vegetables and starch items.
- **GLO 5.2:** Demonstrate an understanding of **recipes**, **menus**, and **food costing**.
 - SLO 11C.5.2.1 Demonstrate the ability to follow a recipe.
- **GLO 5.3:** Demonstrate an understanding of **nutrition**.
 - SLO 11C.5.3.1 Demonstrate an understanding of the nutritional components of various foods.

- **Goal 6:** Apply the transferable, **cross-curricular** knowledge and skills, as they relate to the culinary arts (literacy, numeracy, the arts, the sciences, etc.).
 - **GLO 6.1:** Apply the transferrable **literacy** cross-curricular knowledge and skills to the culinary arts.
 - SLO 11C.6.1.1 Demonstrate knowledge and skills in literacy by reading, interpreting, communicating, and applying information.
 - **GLO 6.2:** Apply the transferrable **numeracy** cross-curricular knowledge and skills to the culinary arts.
 - SLO 11C.6.2.1 Demonstrate numeracy knowledge and skills by solving mathematical problems.
 - SLO 11C.6.2.2 Demonstrate the ability to work with fractions, ratios, decimals, and percentages, and to convert between units of measurement [such as metric and standard (imperial)].
 - SLO 11C.6.2.3 Describe and demonstrate the procedures used to read and follow recipes. (Adjust recipe yields; Recipe conversions; Calculations and formulas) (A6.3)
 - adjust recipe yields
 - recipe conversions
 - calculations and formulas
 - cost control implications
 - **GLO 6.3:** Apply the transferrable cross-curricular knowledge and skills from **the arts** to the culinary arts.

No applicable SLOs.

- **GLO 6.4:** Apply the transferrable cross-curricular knowledge and skills from **the sciences** to the culinary arts.
 - SLO 11C.6.4.1 Demonstrate an understanding of the use of acids and bases to manipulate the texture, colour, and nutritional levels of fruits or vegetables.

- **Goal 7:** Demonstrate an awareness of **sustainability** as it pertains to the culinary arts.
 - **GLO 7.1:** Demonstrate an awareness of **sustainability** as it pertains to the culinary arts.

SLO 11C.7.1.1	Demonstrate the ability to minimize and manage waste.
SLO 11C.7.1.2	Demonstrate an awareness of the disposal and recycling of waste.
SLO 11C.7.1.3	Demonstrate the ability to rotate stock in a way to minimize waste.

- **Goal 8:** Demonstrate an awareness of the **ethical and legal standards** that pertain to the culinary arts.
 - **GLO 8.1:** Identify and follow the **ethical and legal standards** that pertain to the culinary arts.
 - SLO 11C.8.1.1 Demonstrate an awareness of ethics.
- **Goal 9:** Demonstrate the **employability skills** required in the culinary arts.
 - **GLO 9.1:** Demonstrate fundamental **employability skills**.

SLO 11C.9.1.1	Demonstrate employability skills (e.g., being prepared for work on time, setting up workstations, staying on task, working productively, accepting responsibility for one's actions, etc.).
SLO 11C.9.1.2	Demonstrate adherence to a professional dress code.
SLO 11C.9.1.3	Demonstrate the skills required to work as a member of a team.
SLO 11C.9.1.4	Demonstrate initiative in performing tasks.

GLO 9.2: Demonstrate an understanding of the **business operation** of a culinary establishment.

SLO 11C.9.2.1	Demonstrate an awareness of the business	
	characteristics of enterprises such as restaurants,	
	catering establishments, hotels, etc., including the need to generate a profit.	
SLO 11C.9.2.2	Demonstrate an awareness of the ways in which employees can contribute to the success of a business.	

- **GLO 9.3:** Demonstrate the knowledge, skills, and attitudes required to **think critically** in order to solve complex problems.
 - SLO 11C.9.3.1 Demonstrate the ability to solve problems by focusing only on facts, and not allowing biases to interfere with that process.
- **GLO 9.4:** Demonstrate an awareness of **culture** and **diversity**, and its importance in the workplace.
 - SLO 11C.9.4.1 Demonstrate an awareness of some of the benefits, to themselves and to others, of being able to interact successfully with people of various cultures.
 - SLO 11C.9.4.2 Demonstrate an awareness of some of the cultural perspectives surrounding vegetables and starches.
- **Goal 10:** Demonstrate an understanding of the **scope** of the culinary arts (along with associated professions), including **working conditions**, and **training** and **career opportunities**.
 - **GLO 10.1:** Demonstrate an understanding of the **scope** of the culinary arts (along with associated professions), including **working conditions**.
 - SLO 11C.10.1.1 Demonstrate an awareness of the working conditions typically found in the culinary arts and associated professions.
 - **GLO 10.2:** Demonstrate an understanding of **career** and **training opportunities** in the culinary arts and associated professions.

No applicable SLOs.

- **Goal 11:** Demonstrate an understanding of the **evolution** of, and the **innovations and new trends** in, the culinary arts.
 - **GLO 11.1:** Demonstrate an understanding of the **evolution** of, and the **innovations and new trends** in, the culinary arts.
 - SLO 11C.11.1.1 Demonstrate an understanding of the evolution of, and the innovations and new trends in, vegetables and starches.