

Milwaukee Area Technical College

# CULART-128 Vegetables, Starches and Grains

## Course Outcome Summary

### Course Information

<b>Description</b>	Basic principles of vegetable, starches and grains preparation and presentation are taught. Study is made of various cooking methods/styles/trends and procedures applied to these categories. Scientific principles relating to the physical composition of different foods and the chemical changes involved in the cooking process are analyzed. Principles include: heat transfer, food composition, sanitation practice, personal hygiene, foundation recipes, food processing tools and equipment, state of professionalism, and knife skills.
<b>Total Credits</b>	2
<b>Total Hours</b>	64

### Types of Instruction

Instruction Type	Credits/Hours
On-Campus Lab	2 crs / 64 hrs

### To Apply for Credit for Prior Learning and Experience

- Students must submit a portfolio, resume, and letter(s) of work reference from their employer(s).
- The portfolio should include a narrative explanation of your knowledge of the course competencies.
- For more information contact the Culinary Arts Department Chairperson Paul Carrier – [carrierp@matc.edu](mailto:carrierp@matc.edu)

### Course Competencies

#### 1. Explain basic cooking principles.

##### Linked Career Essentials

Effective Communication Through Speaking and Listening  
Technological Competency

##### Assessment Strategies

- 1.1. through class discussions.
- 1.2. through exams.
- 1.3. through lab assignments.

##### Criteria

*Your performance will be successful when:*

- 1.1. you participate regularly in discussions on the topic.
- 1.2. you achieve a minimum 75% accuracy on exams.
- 1.3. you complete lab assignments as specified by the instructor.

##### Learning Objectives

- 1.a. Explain the effects of heat on various food groups.

- 1.b. Explain the characteristics of heat transfer.
- 1.c. Explain how dry heat methods affect food groups.
- 1.d. Explain how moist heat methods affect food groups.
- 1.e. Define cooking terms.
- 1.f. Explain common cooking practices as they relate to a professional cooking.

## **2. Demonstrate sanitation procedures in a professional kitchen.**

### **Linked Career Essentials**

Effective Communication Through Speaking and Listening  
Technological Competency

### **Assessment Strategies**

- 2.1. through lab assignments.
- 2.2. through practical exams.

### **Criteria**

*Your performance will be successful when:*

- 2.1. you complete lab assignments as specified by the instructor.
- 2.2. you achieve a minimum 74% accuracy on practical exams.

### **Learning Objectives**

- 2.a. Explain sanitation principles.
- 2.b. Maintain a high level of personal hygiene.
- 2.c. Demonstrate proper sanitation principles relating to food handling.
- 2.d. Demonstrate proper sanitation principles relating to food purchasing.
- 2.e. Demonstrate proper sanitation principles relating to food preparation.
- 2.f. Cook food to proper internal temperatures.
- 2.g. Demonstrate proper sanitation principles relating to food storage.
- 2.h. Demonstrate proper cleaning techniques.
- 2.i. Demonstrate proper sanitizing techniques.

## **3. Demonstrate safety principles in a professional kitchen.**

### **Linked Career Essentials**

Effective Communication Through Speaking and Listening  
Professionalism  
Technological Competency

### **Assessment Strategies**

- 3.1. through lab assignments.
- 3.2. through practical exams.

### **Criteria**

*Your performance will be successful when:*

- 3.1. you complete lab assignments as specified by the instructor.
- 3.2. you achieve a minimum 75% accuracy on practical exams.

### **Learning Objectives**

- 3.a. Demonstrate industry standards for safety in the prevention of fires.
- 3.b. Demonstrate industry standards for safety in the prevention of cuts.
- 3.c. Demonstrate industry standards for safety in the prevention of burns.
- 3.d. Demonstrate industry standards for safety in the prevention of scrapes.
- 3.e. Demonstrate industry standards for safety in the prevention of back injuries.

## **4. Demonstrate mise en place techniques.**

### **Linked Career Essentials**

Effective Communication Through Speaking and Listening  
Technological Competency

### **Assessment Strategies**

- 4.1. through lab assignments.
- 4.2. through practical exams.

## Criteria

*Your performance will be successful when:*

- 4.1. you complete lab assignments as specified by the instructor.
- 4.2. you achieve a minimum 75% accuracy on practical exams.

## Learning Objectives

- 4.a. Identify cooking equipment.
- 4.b. Assemble the food products in advance of cooking.
- 4.c. Assemble small wares in advance of cooking.
- 4.d. Assemble measuring devices in advance of cooking.
- 4.e. Assemble knives in advance of cooking.
- 4.f. Assemble pot and pans in advance of cooking.
- 4.g. Assemble processing equipment in advance of cooking.
- 4.h. Maintain a neat, orderly, workstation.
- 4.i. Demonstrate knife skill proficiency.

## 5. Demonstrate recipe proficiency.

### Linked Career Essentials

Effective Communication Through Speaking and Listening  
Mathematical Competency  
Technological Competency

### Assessment Strategies

- 5.1. through lab assignments.
- 5.2. through practical exams.

## Criteria

*Your performance will be successful when:*

- 5.1. you complete lab assignments as specified by the instructor.
- 5.2. you achieve a minimum 75% accuracy on practical exams.

## Learning Objectives

- 5.a. Measure ingredients with 100% accuracy.
- 5.b. Follow the procedures listed in the recipe.
- 5.c. Convert recipe yields.
- 5.d. Write a professional recipe.
- 5.e. Calculate recipe costs.

## 6. Demonstrate knife skills proficiency.

### Linked Career Essentials

Effective Communication Through Speaking and Listening  
Technological Competency

### Assessment Strategies

- 6.1. through lab assignments.
- 6.2. through practical exams.

## Criteria

*Your performance will be successful when:*

- 6.1. you complete lab assignments as specified by the instructor.
- 6.2. you achieve a minimum 75% accuracy on practical exams.

## Learning Objectives

- 6.a. List the names of commonly used knife cuts.
- 6.b. Explain the purpose for each of the commonly used knife cuts.
- 6.c. Demonstrate large dice.
- 6.d. Demonstrate medium dice.
- 6.e. Demonstrate small dice.
- 6.f. Demonstrate a brunoise knife cut.
- 6.g. Demonstrate a fermiere knife cut.

- 6.h. Demonstrate a lozenge knife cut.
- 6.i. Demonstrate a batonnet knife cut.
- 6.j. Demonstrate a julienne knife cut.
- 6.k. Demonstrate an oblique knife cut.

## **7. Demonstrate a technical proficiency in the preparation of vegetables.**

### **Linked Career Essentials**

Effective Communication Through Speaking and Listening  
Technological Competency

### **Assessment Strategies**

- 7.1. through lab assignments.
- 7.2. through practical exams.

### **Criteria**

*Your performance will be successful when:*

- 7.1. you complete lab assignments as specified by the instructor.
- 7.2. you achieve a minimum 75% accuracy on practical exams.

### **Learning Objectives**

- 7.a. Identify the classifications of fresh vegetables.
- 7.b. Explain the effects of heat on color, flavor, and texture.
- 7.c. Handle fresh vegetables according to industry standards.
- 7.d. Trim vegetables as needed prior to cooking.
- 7.e. Incorporate seasonal vegetables.
- 7.f. Store fresh vegetables according to industry standards.
- 7.g. Blanch vegetables according to industry standards.
- 7.h. Shock vegetables according to industry standards.
- 7.i. Boil vegetables according to industry standards.
- 7.j. Steam vegetables according to industry standards.
- 7.k. Sauté vegetables according to industry standards.
- 7.l. Braise vegetables according to industry standards.
- 7.m. Bake vegetables according to industry standards.
- 7.n. Pan fry vegetables according to industry standards.
- 7.o. Stir fry vegetables according to industry standards.
- 7.p. Roast vegetables according to industry standards.
- 7.q. Prepare glazed carrots/root vegetables according to industry standards.

## **8. Demonstrate a technical proficiency in the preparation of potatoes.**

### **Linked Career Essentials**

Effective Communication Through Speaking and Listening  
Mathematical Competency  
Technological Competency

### **Assessment Strategies**

- 8.1. through lab assignments.
- 8.2. through practical exams.

### **Criteria**

*Your performance will be successful when:*

- 8.1. you complete assignments as specified by the instructor.
- 8.2. you achieve a minimum 75% accuracy on practical exams.

### **Learning Objectives**

- 8.a. Prepare pureed potatoes according to industry standards.
- 8.b. Prepare duchesse potatoes according to industry standards.
- 8.c. Prepare oven-roasted potatoes according to industry standards.
- 8.d. Prepare parsley boiled potatoes according to industry standards.
- 8.e. Prepare roesti or hash browns according to industry standards.
- 8.f. Prepare baked potatoes according to industry standards.

- 8.g. Prepare double-baked potatoes according to industry standards.
- 8.h. Prepare Boulangere potatoes according to industry standards.
- 8.i. Prepare Dauphinoise 1or2 potatoes according to industry standards.
- 8.j. Prepare Potatoes Anna according to industry standards.
- 8.k. Prepare potato chips according to industry standards.
- 8.l. Prepare potato pancakes according to industry standards.

## 9. Demonstrate a technical proficiency in the preparation of rice/Grain

### Linked Career Essentials

Effective Communication Through Speaking and Listening  
 Mathematical Competency  
 Technological Competency

### Assessment Strategies

- 9.1. through lab assignments.
- 9.2. through practical exams.

### Criteria

*Your performance will be successful when:*

- 9.1. you complete lab assignments as specified by the instructor.
- 9.2. you achieve a minimum 75% accuracy on practical exams.

### Learning Objectives

- 9.a. Prepare rice pilaf according to industry standards.
- 9.b. Prepare risotto according to industry standards.
- 9.c. Prepare wild rice according to industry standards.
- 9.d. Prepare basmati rice according to industry standards.
- 9.e. Prepare brown rice according to industry standards.
- 9.f. Prepare quinoa according to industry standards.
- 9.g. Prepare dried beans according to industry standards.

## 10. Demonstrate a technical proficiency in the preparation of pasta products.

### Linked Career Essentials

Effective Communication Through Speaking and Listening  
 Mathematical Competency  
 Technological Competency

### Assessment Strategies

- 10.1. through lab assignments.
- 10.2. through practical exams.

### Criteria

*Your performance will be successful when:*

- 10.1. you complete lab assignments as specified by the instructor.
- 10.2. you achieve a minimum 75% accuracy on practical exams.

### Learning Objectives

- 10.a. Prepare fresh pasta ravioli according to industry standards.
- 10.b. Prepare fresh pasta fettucine according to industry standards.
- 10.c. Prepare spaetzle according to industry standards.
- 10.d. Prepare gnocchi according to industry standards.
- 10.e. Prepare Moroccan and Israeli couscous according to industry standards.
- 10.f. Prepare polenta according to industry standards.
- 10.g. Prepare dry pasta according to industry standards.