Tech Prep in Culinary Arts

A consortium of High School, Community College and University Departments

This document contains student competency requirements for the specialized area of:

Nutrition for Culinary Arts
CUL 108
3 Credits

To receive college credit, a student must successfully complete at least 80% of the competencies and receive a local grade of A or B. The high school instructor is asked to initial each competency area that the student successfully completes. By initialing these competencies, the instructor is verifying the student has successfully completed the competency tasks required for college credit.

Recommended Text: Nutrition Now; 5th edition

Revision date: September 2008
# CULINARY 108 / Nutrition for Culinary Arts

## COMPETENCY AREAS:

<table>
<thead>
<tr>
<th>Unit</th>
<th>Credit Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit 1 Key Concepts and Terms .....................................................</td>
<td></td>
</tr>
<tr>
<td>Unit 2 Inside story about Nutrition and Health ..................................</td>
<td></td>
</tr>
<tr>
<td>Unit 3 Knowing about Nutrition ........................................................</td>
<td></td>
</tr>
<tr>
<td>Unit 4 Understanding Food and Nutrition Labels ....................................</td>
<td></td>
</tr>
<tr>
<td>Unit 5 Nutrition, Attitudes and Behavior ............................................</td>
<td></td>
</tr>
<tr>
<td>Unit 6 Healthy Diets ...........................................................................</td>
<td></td>
</tr>
<tr>
<td>Unit 7 How the Body uses Food .............................................................</td>
<td></td>
</tr>
<tr>
<td>Unit 8 Calories; Food, Energy and Energy Balance ...................................</td>
<td></td>
</tr>
<tr>
<td>Unit 9 The highs and lows of weight status ..........................................</td>
<td></td>
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<tr>
<td>Unit 10 Controlling weight ....................................................................</td>
<td></td>
</tr>
<tr>
<td>Unit 11 Eating Disorders .......................................................................</td>
<td></td>
</tr>
<tr>
<td>Unit 12 Facts about Sugars, Starches and Fiber .....................................</td>
<td></td>
</tr>
<tr>
<td>Unit 13 Diabetes ....................................................................................</td>
<td></td>
</tr>
<tr>
<td>Unit 14 Positives and Negatives of Alcohol ..........................................</td>
<td></td>
</tr>
<tr>
<td>Unit 15 Proteins and Amino Acids ..........................................................</td>
<td></td>
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<tr>
<td>Unit 16 Vegetarian Diets ........................................................................</td>
<td></td>
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<tr>
<td>Unit 17 Food Allergies ..........................................................................</td>
<td></td>
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<tr>
<td>Unit 18 Fats and Cholesterol ..................................................................</td>
<td></td>
</tr>
<tr>
<td>Unit 19 Nutrition and Heart Disease ....................................................</td>
<td></td>
</tr>
<tr>
<td>Unit 20 Vitamins and Health ...................................................................</td>
<td></td>
</tr>
<tr>
<td>Unit 21 Phytochemicals and Genetically Modified Food .............................</td>
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<tr>
<td>Unit 22 Diet and Cancer ...........................................................................</td>
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</tbody>
</table>
Unit 23 Minerals .................................................................
Unit 24 Dietary Supplements and Functional Foods.................................
Unit 25 Water as an essential nutrient....................................................
Unit 26 Nutrient and Gene Interactions..................................................
Unit 27 Nutrition and Physical Fitness...................................................
Unit 28 Nutrition and Physical Performance ...........................................

Student Name: _______________________________________________________

High School: _______________________________________________________

Student Identification Number: ______________________ / Soc. Sec. # ______________

High School Grade Awarded: ____________

__________________________
(high school instructor signature)

Note: Signature verifies successful completion of a minimum of 80% of identified competencies and awarding of a local high school grade of A or B:

Date: ___________________

The following must be provided as documentation of successful completion
1. Instructor competency verification sheet
CULINARY 108 / Nutrition for Culinary Arts

This course of instruction is designed for students entering the food service and hospitality industry. Students will study information related to the interaction of nutrients in the body and factors which govern nutrient requirements.

Rating Scale for Performance Tasks:

4 - Highly Skilled/Proficient
   Performs the task independently and with high proficiency
   Student can complete the competency accurately.
   Student can direct others to do the competency.
   Student needs little supervision.
   Written tests, 90%

3 – Skilled/Performs with Minimum Supervision
   Performs the task independently with adequate proficiency
   Student can perform all parts of the competency.
   Student needs only completed work spot-checked.
   A student meets speed and accuracy requirements (if any).
   Student needs minimum supervision.
   Written tests, 80%

2 - Limited Skills/Performs with Close Supervision
   Needs improvement in independently and satisfactorily completing tasks
   Student can perform most parts of the competency.
   Student needs help with only the most difficult parts.
   Student needs close supervision.
   Written tests, 70%

1 – Exposure/Introductory
   Student can do simple basics of this competency with very close supervision.
   Received instruction but has not developed skill
   Score of 60% or above

0 - No exposure/Not Taught
   Student has had no exposure to this competency
### Culinary Competency Unit 1

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<tr>
<th>Competency Rating Scale</th>
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1. Define the meaning of nutrition
2. Discuss food terrorism
3. Identify some nutrients that must be provided by the diet
4. Identify abbreviations of weights and measures
5. Requirements for essential nutrients
6. Identify Nutrient intake standards
7. List steps in development of nutrient deficiencies and toxicities
8. Explain nutrient density

### Culinary Competency Unit 2

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1. Discuss nutritional state of the nation
2. Describe the importance of food choices
3. Identify changing diets and changing disease rates
4. Prevention
5. Discuss how we should eat
6. Conduct Diet analysis

### Culinary Competency Unit 3

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1. Discuss nutrition misinformation
2. Identify Nutrition truths and reliable information

### Culinary Competency Unit 4

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1. Identify what foods must be labeled
2. Discuss what should be on the nutrition label
3. Explain truth in labeling
4. Discuss dietary supplement labeling
5. Explain about irradiated foods
6. Define organic foods and labeling
### Culinary Competency Unit 5

5.1 Describe the origins of food choices  
5.2 Define the symbolic meaning of food  
5.3 Discuss cultural values surrounding food  
5.4 Discuss other factors influencing food choices  
5.5 Describe how food choices change  
5.6 List ways diet affects behavior

### Culinary Competency Unit 6

6.1 Describe characteristics of healthful diets  
6.2 Discuss how balanced is the American diet  
6.3 Identify guides to a healthy diet  
6.4 Identify dietary guidelines for Americans  
6.5 Identify dietary guidelines around the world  
6.6 Discuss the new mypyramid

### Culinary Competency Unit 7

7.1 Identify how nutrients in food become available for the bodies use  
7.2 Discuss digestive disorders  
7.3 Define lactose maldigestion and intolerance

### Culinary Competency Unit 8

8.1 Calories are a unit of measure  
8.2 Describe the body’s need for energy  
8.3 Identify where’s the energy in food  
8.4 Calculate the caloric value of foods
Culinary Competency Unit 9

9.1 Define and calculate body mass index
9.2 Estimate normal weight for height
9.3 Assessment of body fat content
9.4 Describe what causes obesity
9.5 Identify the role of diet in the development of obesity
9.6 Discuss obesity prevention
9.7 Define being underweight
9.8 Identify a realistic view of body weight

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Culinary Competency Unit 10

10.1 Discuss health effects of popular diets
10.2 Identify health effects of popular diets
10.3 Discuss organized weight loss programs
10.4 Discuss drastic options for weight loss
10.5 Describe ways to make weight loss last

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Culinary Competency Unit 11

11.1 Define eating disorders
11.2 Define Anorexia Nervosa
11.3 Bulimia Nervosa
11.4 Binge eating disorder
11.5 Discuss resources for eating disorders
11.6 Describe undieting the clash between culture and biology
11.7 Describe the various forms of Pica

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Culinary Competency Unit 12

12.1 Identify carbohydrates
12.2 Describe facts of simple sugars
12.3 Describe alcohol sugars
12.4 Identify facts of artificial sweeteners
12.5 Identify facts of complex carbohydrates
12.6 Discuss facts of dietary fibers
12.7 Identify glycemic index of carbohydrates and carbohydrates in foods
12.8 Discuss carbohydrate related disorders

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Culinary Competency Unit 13

13.1 Discuss the diabetes epidemic and health consequences
13.2 Describe type 2 diabetes
13.3 Discuss prediabetes and insulin resistance
13.4 Identify ways to manage type 2 diabetes
13.5 Describe how sugar intake effects diabetes
13.6 Identify ways to prevent type 2 diabetes
13.7 Identify ways to manage type 1 diabetes
13.8 Discuss gestational diabetes
13.9 Define hypoglycemia
13.8 Discuss diabetes in the future

Culinary Competency Unit 14

14.1 Discuss both positive and negative facts of alcohol
14.2 Describe how alcohol intake effects diet quality
14.3 Discuss alcohol poisoning
14.4 Describe how the body handles alcohol
14.5 Discuss what causes alcoholism

Culinary Competency Unit 15

15.1 Compare proteins images versus reality
15.2 Identify the functions of protein
15.3 Identify amino acids
15.4 Discuss how amino acids differ in quality
15.5 Describe amino acid supplements
15.6 Discuss what happens if a diet contains to little protein
15.7 Discuss how much protein is to much

Culinary Competency Unit 16

16.1 Discuss various perspectives on vegetarianism
16.2 Identify any possible health benefits to vegetarian diets
16.3 Identify the dietary recommendations for vegetarian diets
**Culinary Competency Unit 17**

17.1 Discuss adverse reactions to food
17.2 Discuss how common food allergies are
17.3 Describe various methods for diagnosing food allergies
17.4 Identify ways to treat food allergies
17.5 Discuss food intolerances: lactose maldigestion and intolerance; sulfite sensitivity; red wine, age cheese, and migraines; MSG Chinese restaurant syndrome

**Competency Rating Scale**

| Mastered for college | 4 | 3 | 2 | 1 | 0 |

**Culinary Competency Unit 18**

18.1 Discuss facts of fat
18.2 Identify the functions of dietary fats
18.3 Describe how excess dietary fats, carbohydrates and proteins are stored as fat
18.4 Identify the various forms of fats
18.5 Identify sources of cholesterol
18.6 Discuss fat substitutes and are they safe
18.7 Identify way to find fat contents of food

**Competency Rating Scale**

| Mastered for college | 4 | 3 | 2 | 1 | 0 |

**Culinary Competency Unit 19**

19.1 Describe the connection of diet and heart disease
19.2 Describe what is heart disease
19.3 Identify who is at risk of heart disease
19.4 Discuss diet and lifestyle in the management of heart disease

**Competency Rating Scale**

| Mastered for college | 4 | 3 | 2 | 1 | 0 |

**Culinary Competency Unit 20**

20.1 Describe what vitamins are
20.2 Discuss what vitamins do
20.3 Identify protection measures from vitamin deficiencies
20.4 Describe antioxidant vitamins

**Competency Rating Scale**

| Mastered for college | 4 | 3 | 2 | 1 | 0 |
Culinary Competency Unit 21

21.1 Describe the characteristics of phytochemicals
21.2 Discuss how phytochemicals benefit health
21.3 Identify how phytochemicals work
21.4 Discuss diets high in plant foods
21.5 Identify naturally occurring toxins in food
21.6 Discuss genetically modified foods; are they safe and what is the future

Culinary Competency Unit 22

22.1 Define cancer
22.2 Describe how cancer develops
22.3 Discuss the causes of cancer
22.4 Discuss methods of fighting cancer with the fork

Culinary Competency Unit 23

23.1 Discuss the facts of minerals
23.2 Identify various minerals and their possible deficiencies

Culinary Competency Unit 24

24.1 Discuss regulation policies of dietary supplements
24.2 Identify vitamin and mineral supplements
24.3 Discuss who benefits with supplements
24.4 Discuss herbal remedies

Culinary Competency Unit 25

25.1 Identify waters role as an essential nutrient
25.2 Discuss the nature of our water supply
25.3 Discuss ways to meet the need for water
25.4 Identify water deficiencies
25.5 Discuss water toxicity; can you consume to much
Culinary Competency Unit 26

26.1 Discuss how nutrition and genomics interact
26.2 Discuss various chronic diseases
26.3 Identify diseases as they relate to aging and the genetics of food selection

Culinary Competency Unit 27

27.1 Discuss relation of nutrition and physical fitness
27.2 Create a physical fitness plan

Culinary Competency Unit 28

28.1 Identify basic components of energy formation during exercise
28.2 Discuss how nutrition relates to physical performance
28.3 Identify signs of dehydration
28.4 Discuss fat and weight issues for athletes

Submittal Requirements

The following must be provided as documentation of successful completion

1. Instructor competency verification sheet