# **CFS - Culinary & Food Science**

### Courses

### CFS 315 Chemistry and Analysis of Food

### 4 Credits. 3 Lecture Hours. 3 Lab Hours.

A course on food chemistry with emphasis on the functional properties and reactions of the major food components: carbohydrates, lipids, proteins, and water. Topics include: understanding the effect of chemical changes on the characteristics of food, using analytical and instrumental techniques to investigate food constituents and properties, and developing laboratory skills.

Prerequisites: CHE 111 and MAT 151 (minimum grade C for both), and instructor consent

Instructor Consent Required

### CFS 320 Formulation and Ingredient Functionality 3 Credits. 1 Lecture Hour. 4 Lab Hours.

A course on food formulation practices including analysis of ingredient functionality and the role of current food products in the delivery of a new value proposition. Topics include: product attributes and appeal, and nutrition and safety.

Prerequisites: MAT 151 and CHE 110 (minimum grade C for both) and instructor consent

Instructor Consent Required

### **CFS 325 Food Product Development**

### 3 Credits. 1 Lecture Hour. 4 Lab Hours.

A course that integrates culinary skills, food science knowledge, and effective use of functional ingredients to create high-quality and innovative food products. Topics include: general practices for food formulation, equipment use, and documentation.

Prerequisites: CFS 320 (minimum grade C) and instructor consent Instructor Consent Required

### CFS 340 Colloquium on Current Food Topics

### 3 Credits. 3 Lecture Hours. 0 Lab Hour.

Subject-matter experts from the food industry present information on current industry concerns from varied specialized areas, such as beverages, dairy, cultured foods, flavors, preservation, and baking

Prerequisites: ENG 101 and CUL 200 (minimum grade C for both) and instructor consent

Instructor Consent Required

### CFS 360 Science in Food and Cooking 3 Credits. 1 Lecture Hour. 4 Lab Hours.

A course that deepens understanding of the chemistry of food and fosters better cooking through exploration of culinary science topics and related laboratory activities. Topics include: the science of sauces, flavors, Maillard reactions, emulsions, pH, and colors.

Prerequisites: CFS 315 (minimum grade C) and instructor consent Instructor Consent Required

### CFS 391 Part-Time Cooperative Education 1: Culinary and Food Science

### 1 Credit. 1 Lecture Hour. 20 Lab Hours.

Students seeking a bachelor's degree participate in their first part-time field learning experience related to their degree. Students are expected to register for academic courses during the same semester. Students must follow cooperative education policies and procedures to earn credit. Grades issued are Satisfactory or Unsatisfactory.

Prerequisites: CFS 311 and CFS 320 and co-op coordinator consent Instructor Consent Required

### CFS 392 Part-Time Cooperative Education 2: Culinary and Food Science

### 1 Credit. 1 Lecture Hour. 20 Lab Hours.

Students seeking a bachelor's degree participate in their second parttime field learning experience related to their degree. Students are expected to register for academic courses during the same semester. Students must follow cooperative education policies and procedures to earn credit. Grades issued are Satisfactory or Unsatisfactory. Prerequisites: CFS 391 and co-op coordinator consent Instructor Consent Required

### CFS 393 Part-Time Cooperative Education 3: Culinary and Food Science

#### 1 Credit. 1 Lecture Hour. 20 Lab Hours.

Students seeking a bachelor's degree participate in their third part-time field learning experience related to their degree. Students are expected to register for academic courses during the same semester. Students must follow cooperative education policies and procedures to earn credit. Grades issued are Satisfactory or Unsatisfactory. Prerequisites: CFS 392 and co-op coordinator consent

Instructor Consent Required

### CFS 394 Part-Time Cooperative Education 4: Culinary and Food Science

### 1 Credit. 1 Lecture Hour. 20 Lab Hours.

Students seeking a bachelor's degree participate in their fourth parttime field learning experience related to their degree. Students are expected to register for academic courses during the same semester. Students must follow cooperative education policies and procedures to earn credit. Grades issued are Satisfactory or Unsatisfactory. Prerequisites: CFS 393 and co-op coordinator consent Instructor Consent Required

## CFS 397 Part-Time Career Education Project: Culinary and Food

### 1 Credit. 1 Lecture Hour. 20 Lab Hours.

Students seeking a bachelors degree complete individual study or a special project related to their major field and pertaining to their career goals. Working with an assigned faculty mentor, students define the project goals, carry out project tasks, and evaluate the results. Grades issued are Satisfactory or Unsatisfactory.

Prerequisites: BUS 190 and coordinator consent Instructor Consent Required

# CFS 410 Sensory Evaluation & Food Product Design 4 Credits. 3 Lecture Hours. 2 Lab Hours.

A course on business and scientific aspects of food product development and design, from ideation to commercialization. Topics include: the science of sensory evaluation and its role in product development, consumer research, trend analysis, competitive product analysis, and integration of market research and sensory analysis in product development.

Prerequisites: CFS 325 (minimum grade of C) and instructor consent Instructor Consent Required

### CFS 420 Food Safety and Quality

### 3 Credits. 3 Lecture Hours. 0 Lab Hour.

A course on food production practices that assure quality and safety. Topics include: sanitation practices; control of pathogenic and spoilage microorganisms in food; and prevention, control, and mitigation of threats to the quality and safety of the food system.

Prerequisites: BIO 310 (minimum grade C)

### **CFS 430 Food Processing**

### 4 Credits. 3 Lecture Hours. 2 Lab Hours.

A course on food production systems, including principles of scaleup and large-scale production systems, processing, and packaging technologies.

Prerequisites: CFS 360 (minimum grade C) and instructor consent Instructor Consent Required

# CFS 440 Food Policy, Regulations and Compliance 3 Credits. 3 Lecture Hours. 0 Lab Hour.

A course on regulatory policies that affect food production. Topics include: the Code of Federal Regulations, regulatory agencies and their responsibilities, food labeling guidelines for dietary and health-related claims such as organic and natural, and permissible use of functional and enrichment additives.

Prerequisites: CFS 420 (minimum grade C)

# CFS 490 Culinary and Food Science Capstone 3 Credits. 1 Lecture Hour. 4 Lab Hours.

Students synthesize and apply knowledge and proficiency gained throughout the baccalaureate degree program to complete a project that demonstrates skills in problem-solving, communication, and project management, as well as professional competence.

Prerequisites: CFS 410 and CFS 420 (minimum grade C for both) and instructor consent

Instructor Consent Required

# CFS 491 Full-Time Cooperative Education 1: Culinary and Food Science

### 2 Credits. 1 Lecture Hour. 40 Lab Hours.

Students seeking a bachelor's degree participate in their first full-time field learning experience related to their Culinary and Food Science degree. Students must follow cooperative education policies and procedures to earn credit. Grades issued are Satisfactory or Unsatisfactory.

Prerequisites: CFS 311 and CFS 320 and co-op coordinator consent Instructor Consent Required

# CFS 492 Full-Time Cooperative Education 2: Culinary and Food Science

### 2 Credits. 1 Lecture Hour. 40 Lab Hours.

Students seeking a bachelor's degree participate in their second full-time field learning experience related to their Culinary and Food Science degree. Students must follow cooperative education policies and procedures to earn credit. Grades issued are Satisfactory or Unsatisfactory.

Prerequisites: CFS 491 and co-op coordinator consent Instructor Consent Required

## CFS 497 Full-Time Career Education Project: Culinary and Food Science

#### 2 Credits. 1 Lecture Hour. 40 Lab Hours.

Students seeking a bachelors degree complete individual study or a special project related to their major field and pertaining to their career goals. Working with an assigned faculty mentor, students define the project goals, carry out project tasks, and evaluate the results. Grades issued are Satisfactory or Unsatisfactory.

Prerequisites: BUS 190 and coordinator consent Instructor Consent Required