

# How Family and Consumer Sciences Transitions to CTE

## 12.0501 Baking and Pastry Arts

### Baker/Pastry Chef

#### Nutrition

Family Consumer Sciences Courses <u>FCS Academic Standards</u>				CTE Technical Component <u>Program of Study Task Grid</u>		
Grade 6	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
Identify six major nutrients.	Describe primary functions of nutrients and predict food sources of major nutrients.	Explain how nutrients maintain health and prevent disease.	Describe the relationship between food choices and health problems.	100 Series Introduction to Hospitality & Baking Industry	700 Series Nutrition	Continue building and perfecting skills
Explain how cooking techniques and storage can change the nutritional contribution of foods.	Explain the effects of various cooking techniques and storage principles on nutrients.	Evaluate the effects of various cooking techniques and storage principles on the retention of nutrients.	Demonstrate cooking techniques and storage principles for maximum retention of nutrients.	400 Series Baking Preparations	500 Series Baking Fundamentals	600 Series Purchasing, Receiving, Inventory and Storage
List basic food groups and give examples of foods in each group.	Use basic food groups to classify foods and their nutrient contributions.	Use basic food groups to plan a meal and snack.	Assess personal eating habits in relation to food groups and set a personal nutrition goal.	100 Series Introduction to Hospitality & Baking Industry	700 Series Nutrition	500 Series Baking Fundamentals

Grade 6	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
Identify current dietary guidelines.	Use current dietary guidelines to plan a meal.	Interpret the relationship between current dietary guidelines and health problems, e.g. diabetes, obesity, blood pressure.	Evaluate contemporary food topics, e.g. allergies, vegetarianism, heart-healthy menus in light of dietary guidelines.	100 Series Introduction to Hospitality & Baking Industry	400 Series Baking Preparations	500 Series Baking Fundamentals
Recognize healthy diet modifications including variety, moderation, and balancing caloric intake and energy expenditure.	Give examples of healthy diet modifications including variety, moderation, and balancing caloric intake and energy expenditure.	Predict how healthy diet modifications including variety, moderation, and balancing caloric intake and energy expenditure can affect wellness in different individuals.	Apply diet modification concepts including variety, moderation, and balancing caloric intake and energy expenditure by planning meals for individuals who vary in age, physical activity, and nutritional requirements.	700 Series Nutrition	Continue building and perfecting skills	FCCLA STAR event Baking and Pastry
Identify components of food labels.	Demonstrate how to use food labels to make healthier choices.	Discuss the inspection and labeling systems used with foods.	Evaluate food label information in relation to advertising and marketing strategies.	600 Series Purchasing, Receiving, Inventory and Storage	Continue building and perfecting skills	Continue building and perfecting skills

# Food Science

Family Consumer Sciences Courses FCS Academic Standards				CTE Technical Component Program of Study Task Grid		
Grade 6	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
Define food science.	Identify contributions of food scientists to food production.	Explain contributions of food scientists to food production by matching raw ingredients with finished food products.	Relate the contribution of food scientists to the advancement of global food production.	400 Series Baking Preparation	Continue building and perfecting skills	500 Series Baking Fundamentals
Define calories.	Explain calories and temperature as measurements relevant to food science.	Explain the concept of caloric values of different foods.	Explain how the energy in food is released by the human body.	400 Series Baking Preparation	500 Series Baking Fundamentals	700 Series Nutrition
Observe physical and chemical changes commonly occurring in foods.	Classify physical and chemical changes commonly occurring in foods.	Demonstrate the use of water in food preparation for heat transfer and solutions.	Demonstrate mixtures and emulsions in foods.	400 Series Baking Preparation	Continue building and perfecting skills	Advanced Baking (85 hours)

# Food Preparation

Family Consumer Sciences Courses FCS Academic Standards				CTE Technical Component Program of Study Task Grid		
Grade 6	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
Identify parts of a standardized recipe.	Define several common terms used in standardized recipes.	Differentiate between terms commonly found in standardized recipes, e.g. beat, blend, mix, stir.	Demonstrate reading and following standardized recipes within time limits.	400 Series Baking Preparation	Continue building and perfecting skills	300 Series Business & Math Skills
Identify liquid and dry measuring equipment.	Demonstrate how to measure liquid and dry ingredients.	Adjust quantities of ingredients to produce varying yields with a recipe.	Demonstrate use of measurement equivalents and ingredients substitutions.	400 Series Baking Preparation	Continue building and perfecting skills	Culinary Artistry (100)
Identify basic food preparation equipment.	Demonstrate how to use basic food preparation equipment.	Demonstrate how to use multiple types of food preparation equipment.	Demonstrate how to use a variety of food preparation equipment.	400 Series Baking Preparation	500 Series Baking Fundamentals	Instructional Practices (90)
Identify standard food preparation techniques, e.g. mise en place.	Explain the value of standard food preparation techniques, e.g. mise en place.	Demonstrate standard food preparation techniques, e.g. mise en place.	Evaluate the use of standard food preparation techniques, e.g. mise en place.	400 Series Baking Preparation	500 Series Baking Fundamentals	Continue building and perfecting skills
Define time management. Define teamwork.	Identify attributes of effective time management. Identify attributes of a team member.	Prepare a plan of work that demonstrate the principles of time management and teamwork in a lab setting.	Apply the principles of time management and teamwork in a lab setting.	600 Series Purchasing, Receiving, Inventory & Storage	800 Series Baking Planning	900 Series Human Relations Skills
Use introductory recipes to prepare snacks.	Use fundamental recipes to prepare various types of foods (bread, pasta, eggs, meat, fish, poultry, fruits, vegetables)	Use basic recipes to prepare various types of foods (bread, pasta, eggs, meat, fish, poultry, fruits, vegetables) for meals.	Use advanced recipes to prepare various types of foods (bread, pasta, eggs, meat, fish, poultry, fruits, vegetables) for meals.	400 Series Baking Preparation	500 Series Baking Fundamentals	Continue building and perfecting skills

## Sanitation and Safety

Family Consumer Sciences Courses FCS Academic Standards				CTE Technical Component Program of Study Task Grid		
Grade 6	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
Describe good personal hygiene and health practices in food preparation areas.	Identify how food is contaminated during food preparation and explain ways to prevent cross-contamination.	Explain the four food safety principles to reduce foodborne illness: clean, separate, cook, and chill.	Demonstrate food safety principles and kitchen sanitation procedures to minimize health and safety hazards in a lab setting.	200 Series Sanitation & Safety	Continue building and perfecting skills	Continue building and perfecting skills
Explain points in food preparation where handwashing is needed.	Explain Hazard Analysis Critical Control Point (HACCP).	Apply the Hazard Analysis Critical Control Point (HACCP) during all food handling processes.	Write the Hazard Analysis Critical Control Point (HACCP) guidelines into recipe directions.	200 Series Sanitation & Safety	600 Series Purchasing, Receiving, Inventory and Storage	Continue building and perfecting skills
Describe how to safely use food preparation tools/utensils, e.g. knives.	Demonstrate the safe use of food preparation tools/utensils, e.g. knives in fundamental food preparation.	Demonstrate the safe use of food preparation tools/utensils, e.g. knives in basic food preparation.	Demonstrate the safe use of food preparation tools/utensils, e.g. knives in more advanced food preparation.	400 Series Baking Preparation	Continue building and perfecting skills	Continue building and perfecting skills
List appropriate emergency procedures for food preparation areas.	Identify safety precautions and emergency procedures to use in food preparation areas.	Demonstrate appropriate safety precautions and emergency procedures to use in food preparation areas.	Analyze reasons for the use of safety precautions and emergency procedures in food preparation areas.	500 Series Baking Fundamentals	Continue building and perfecting skills	Continue building and perfecting skills

# Fundamentals of Culinary Arts

Family Consumer Sciences Courses FCS Academic Standards				CTE Technical Component Program of Study Task Grid		
Grade 6	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
Identify food preferences for individual and families.	Explain how food preferences vary among individuals and families.	Explain how to use foods to meet nutrition and wellness needs of individuals and families across the life span.	Demonstrate how to use foods to meet nutrition and wellness needs of individuals and families across the life span.	500 Series Baking Fundamentals	Continue building and perfecting skills	Continue building and perfecting skills
Recognize the role of family in teaching food-related culture and traditions.	Describe food customs and habits of various cultures.	Describe factors that affect menu choices and food preferences in the marketing of food.	Plan and design a menu that recognizes food preferences of various cultures, ethnicities, and health statuses.	500 Series Baking Fundamentals	Continue building and perfecting skills	Continue building and perfecting skills

## Service Procedures

Family Consumer Sciences Courses FCS Academic Standards				CTE Technical Component Program of Study Task Grid		
Grade 6	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
Identify behaviors for establishing successful working relationships.	Identify skills needed by foodservice professionals.	Demonstrate positive relations with others, cooperate through teamwork and group participation.	Exhibit appropriate work habits and attitudes; demonstrate a willingness to compromise.	900 Series Human Relations Skills	Continue building and perfecting skills	800 Series Baking Planning
List career opportunities in the food service industry.	Describe career opportunities in the food service industry.	Report on career opportunities in the food service industry.	Interview professionals in the food service industry.	100 Series Introduction to the Hospitality & Baking Industry	Continue building and perfecting skills	Management & Supervision (85)
Intentionally Blank	Intentionally Blank	Intentionally Blank	Intentionally Blank	Intentionally Blank	Intentionally Blank	Industry Certification
Intentionally Blank	Intentionally Blank	Intentionally Blank	Intentionally Blank	Intentionally Blank	Intentionally Blank	Cooperative Education Opportunities
Intentionally Blank	Intentionally Blank	Intentionally Blank	Intentionally Blank	Intentionally Blank	Intentionally Blank	Completed Task Grid

## FCCLA Activities

Family Consumer Sciences Courses FCS Academic Standards				CTE Technical Component Program of Study Task Grid		
Grade 6	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
Choose PA or National FCCLA STAR Event and/or National Program or Skill demonstration (Level 1 grades 5-8)	Choose PA or National FCCLA STAR Event and/or National Program or Skill Demonstration	Choose PA or National FCCLA STAR Event and/or National Program or Skill Demonstration	Choose PA or National FCCLA STAR Event and/or National Program or Skill demonstration (Level 2 grades 9-10)	Choose PA or National FCCLA STAR Event and/or National Program or Skill Demonstration (Level 3 grades 10-12)	Choose PA or National FCCLA STAR Event and/or National Program or Skill Demonstration	Choose PA or National FCCLA STAR Event and/or National Program or Skill Demonstration

### FCCLA STAR Events (Students Taking Action with Recognition)

- Baking & Pastry (L3)
- Career Investigation (1-2-3)
- Chapter Service Project Display (L1-2-3)
- Chapter Service Project Portfolio (L1-2-3)
- Chapter in Review Display (L1-2-3)
- Chapter in Review Portfolio (L1-2-3)
- Culinary Arts (L3)
- Culinary Math Management (L3)
- Entrepreneurship (L1-2-3)
- Event Management (L1-2-3)
- Food Innovations (1-2-3)
- Hospitality, Tourism, and Recreation (L2-3)
- Interpersonal Communications (L1-2-3)
- Job Interview (L2-3)
- Leadership (L2-3)
- Nutrition and Wellness (L1-2-3)
- Parliamentary Procedure (L1-2-3)
- Professional Presentation (L1-2-3)
- Promote and Publicize FCCLA! (L1-2-3)
- Public Policy Advocate (L1-2-3)
- Say Yes to FCS Education (L2-3)
- Sports Nutrition (L123)
- Sustainability Challenge (L1-2-3)
- **Online STAR Events:**
- Digital Stories for Change (L1-2-3)
- FCCLA Chapter Website
- Instructional Video design (L1-2-3)

### National Programs in Action

- Career Connection (L1-2-3)
- Families First (L1-2-3)
- Financial Fitness (L1-2-3)
- Community Service (L1-2-3)
- Power of One (L1-2-3)
- STOP the Violence-Students Taking on Prevention (L1-2-3)
- Student Body (L1-2-3)

## PA STAR Events

- PA Baking Skills (L2-3)
- PA Cake Decorating (L2-3)
- PA Food Art (L2-3)
- PA Food and Beverage Service Event (L2-3)
- PA Knife Skills (L2-3)
- PA Menu Planning Event (L1-2-3)

## National Fall Conference Skills Demonstration Events

- Consumer Math Challenge (L1-2-3)
- Culinary Math Challenge (L-2-3)
- Hospitality, Tourism & Recreation Challenge (L2-3)
- Nutrition Challenge (L1-2-3)
- Science in FCS Challenge (1-2-3)
- Culinary Food Art (L2-3)
- Culinary Knife Skills (L2-3)
- FCCLA Creed Speaking & Interpretation (L1-2)
- Impromptu Speaking (L1-2-3)
- Interviewing Skills (L1-2-3)
- Pastry Arts Technical Decorating Skills (L2-3)
- Speak out for FCCLA (L1-2-3)
- #TeachFCS (L1-2-3)

## References

- [American Association of Family and Consumer Sciences](#)
- [American Culinary Federation](#)
- [American Hotel and Lodging Educational Institute](#)
- [American Safety & Health Institute](#)
- [Bureau of Career & Technical Education/PDE](#)
- [Family, Career and Community Leaders of America \(FCCLA\)](#)
- [PDE Industry-Recognized Certifications for Career and Technical Education Programs Guide](#)
- [National Association of State Administrators of Family and Consumer Sciences](#)
- [National Restaurant Association](#)
- [National Safety Council](#)
- [NOCTI](#)
- [Occupational Safety and Health Administration](#)
- [PA Family, Career and Community Leaders of America \(PAFCCLA\)](#)
- [PA Restaurant & Lodging Association PRLA](#)
- [Penn State Extension](#)
- [ServSafe](#)
- [US Food and Drug Administration](#)