

### Baking and Pastry Arts/Baker/Pastry Chef, Classification of Instructional Program (CIP) 12.0501

### Units of Instruction and Task Grid Linked to Pennsylvania Core Standards

**Common Career** 

**Secondary Competency Task Grid** 

	with Unit and Task Numbers	Technical Core Standards	Reading for Technical Subjects Standard 3.5	Standards for Writing for Technical Subjects Standard 3.6	Standards for Mathematics Standard 2.1
100	INTRODUCTION TO THE HOSPITALITY AND BAKING INDUSTRY.				
101 102 103 104 105 106	Define hospitality and the importance of customer service within the baking and pastry industry.  Discuss the growth and development of the baking and pastry industry.  Describe cuisines and their relationship to history and cultural development.  Outline the structure and functional areas in businesses (retail/wholesale/baking and distribution).  Identify career opportunities and personal traits for jobs in the baking industry.  Identify professional organizations and certifications.  Use multimedia resources to identify industry trends.	Refer to the end of this document for an explanation of the following standards and sample indicators:  CC TECH CORE STANDARDS:  AGRICULTURE/FO OD AND NATURAL RESOURCES CLUSTER AG1 - AG5  FOOD PROCESSING PATHWAY AG-FD-4	KEY IDEAS/DETAILS GRADES 9-10 Standard PCS.3.5.9-10.A Standard PCS.3.5.9-10.B Standard PCS.3.5.9-10.C GRADES 11-12 Standard PCS.3.5.11-12A Standard PCS.3.5.11-12.B Standard PCS.3.5.11-12.C  CRAFT AND STRUCTURE GRADES 9-10 Standard PCS.3.5.9-10.D. Standard PCS.3.5.9-10.E Standard PCS.3.5.9-10.F GRADES 11-12 Standard PCS.3.5.11-12.D	TEXT TYPES/ PURPOSE  GRADES 9-10  Standard PCS.3.6.9-10.A  Standard PCS.3.6.9-10.B  GRADES 11-12  Standard PCS.3.6.11- 12.A  Standard PCS.3.6.11- 12.B  PRODUCTION AND DISTRIBUTION OF WRITING GRADES 9-10  Standard PCS.3.6.9-10.C  Standard PCS.3.6.9-10 D	

Pennsylvania Core Standards for

Pennsylvania Core

Pennsylvania Core

	HOSPITALITY. & TOURISM CLUST HT-1, HI-2, HT-3, HT-4, HT-6  RESTAURANT AN FOOD SERVICES PATHWAY HT-RFB 08 HT-RFB 09 HT-RFB 10	INTEGRATE	Standard PCS.3.6.9-10.E  GRADES 11-12 Standard PCS.3.6.11-12 C Standard.PCS.3.6.11-12.D Standard PCS.3.6.11-12 E  RESEARCH GRADES 9-10 Standard PCS.3.6.9-10.F Standard PCS.3.6.9-10.G Standard PCS.3.6.9-10.H GRADES 11-12 Standard PCS.3.6.11-12.F Standard PCS.3.6.11-12.G Standard PCS.3.6.11-12.G Standard PCS.3.6.11-12.H	
200 SANITATION AND SAI  201 Identify microorganisms w spoilage and food borne ill requirements and methods and prevention.	which are related to food lnesses; describe their Refer to the end of this document for a	KEY IDEAS/DETAILS GRADES 9-10 Standard PCS 2-5-0-10-A	RANGE OF WRITING GRADES 9-10 Standard PCS.3.5.9-10.I GRADES 11-12 Standard PCS.3.5.11- 12.I  TEXT TYPES/ PURPOSE GRADES 9-10 Standard PCS.3.6.9-10.A	NUMBERS AND OPERATIONS Standard PCS.2.1.HS.F.1

202	Describe cross-contamination and procedures for	and sample	Standard PCS.3.5.9-10.C	Standard PCS.3.6.9-10.B	Standard
	preparing and storing potentially hazardous foods.	indicators:	GRADES 11-12	GRADES 11-12	PCS.2.1.HS.F.2
203	Use proper hygiene, health habits, and wear industry		Standard PCS.3.5.11-12A	Standard PCS.3.6.11-	Standard
20.4	standard apparel.	CC TECH CORE	Standard PCS.3.5.11-12.B	12.A	PCS.2.1.HS.F.3
204	Identify the requirements for receiving and storage of raw and prepared foods, reasons for, and signs of	STANDARDS:	Standard PCS.3.5.11-12.C	Standard PCS.3.6.11-	Standard PCS.2.1.HS.F.4
	food spoilage and contamination (i.e. FIFO).	AGRICULTURE/FO		12.B	Standard
205	Explain the difference between cleaning, sanitizing,	OD AND NATURAL	CRAFT AND STRUCTURE		PCS.2.1.HS.F.5
	and the use and storage of chemicals.	RESOURCES	GRADES 9-10	PRODUCTION AND	Standard
206	Develop and follow a cleaning schedule.	<u>CLUSTER</u>	Standard PCS.3.5.9-10.D.	DISTRIBUTION OF	PCS.2.1.HS.F.6
207	Practice methods of waste disposal, recycling, and sustainability.	AG3 - AG5	Standard PCS.3.5.9-10.E	WRITING	Standard
208	Identify measures for the control of insects, rodents	FOOD PROCESSING	Standard PCS.3.5.9-10.F	GRADES 9-10	PCS.2.1.HS.F.7
	and pests.	PATHWAY	GRADES 11-12	Standard PCS.3.6.9-10.C	
209	Recognize sanitary, safety design, and construction	AG-FD-1, AG-FD-3	Standard PCS.3.5.11-12.D	Standard PCS.3.6.9-10 D	
	features of food production equipment and facilities (i.e. NSF, UL, OSHA, ADA, etc.).		Standard PCS.3.5.11-12.E	Standard PCS.3.6.9- 10.E	
210	Identify Safety Data Sheets (SDS) and the	HOSPITALITY. & TOURISM CLUSTER	Standard PCS.3.5.11-12.F	GRADES 11-12	
	requirements for handling hazardous materials.	HT-5		Standard PCS.3.6.11-12	
211	Conduct a sanitation self-inspection and identify	111 5	INTEGRATE	C	
	modifications necessary for compliance with standards.	RESTAURANT AND	KNOWLEDGE/ IDEAS	Standard.PCS.3.6.11-	
212	Identify the critical control points and the	FOOD SERVICES	GRADES 9-10	12.D	
	Temperature Danger Zone during all food handling	PATHWAY WE DED 62	Standard PCS.3.5.9-10.G	Standard PCS.3.6.11- 12	
	processes as a method for minimizing the risk of	HT-RFB 02 HT-RFB 08	Standard PCS.3.5.9-10.H	Е	
213	food borne illness (HACCP system). List common accidents and injuries in the	HT-RFB 10	Standard PCS.3.5.9-10.I		
213	foodservice industry, outline a safety management		GRADES 9-12	RESEARCH	
	program and emergency policies.		Standard PCS.3.5.11-12.G	GRADES 9-10	
214	Identify types, uses, and location of fire		Standard PCS.3.5.11-12.H	Standard PCS.3.6.9-10.F	
215	extinguishers in the foodservice area.		Standard PCS.3.5.11-12.I	Standard PCS.3.6.9-10.G	
215	Describe the role of regulatory agencies governing sanitation and food safety.			Standard PCS.3.6.9-10.H	
216	Acquire industry sanitation certifications (i.e.		RANGEOF	GRADES 11-12	
	ServSafe).		READING/LEVEL OF COMPLEX TEXTS	Standard PCS.3.6.11- 12.F	
			GRADES 9-10	Standard PCS.3.6.11-	
			Standard PCS.3.5.9-10.J	12.G	
			GRADES 11-12	Standard PCS.3.6.11-	
			GILLED 11-12	12.H	

200	DUGINIEGO AND MATIN CENT I C		Standard PCS.3.5.11-12.J	RANGE OF WRITING GRADES 9-10 Standard PCS.3.5.9-10.I GRADES 11-12 Standard PCS.3.5.11- 12.I	
300 301 302 303	Perform basic math functions using the baker's percentage (%) and friction factor.  Discuss labor cost.  Calculate the cost of recipes/formulas including: As	Refer to the end of this document for an explanation of the following standards	KEY IDEAS/DETAILS GRADES 9-10 Standard PCS.3.5.9-10.A	TEXT TYPES/ PURPOSE GRADES 9-10	NUMBERS AND OPERATIONS Standard PCS.2.1.HS.F.1
304	Purchased, Edible Portion, and factors affecting yield percentage.  Calculate the selling price of bakery items.  Complete a sales transaction using related industry	and sample indicators:  CC TECH CORE	Standard PCS.3.5.9-10.B Standard PCS.3.5.9-10.C GRADES 11-12	Standard PCS.3.6.9-10.A Standard PCS.3.6.9-10.B GRADES 11-12 Standard PCS.3.6.11-	Standard PCS.2.1.HS.F.2 Standard PCS.2.1.HS.F.3
305	standards including cash handling and current technology (i.e. guest checks, computers, calculators, etc.).	STANDARDS:  AGRICULTURE/FO	Standard PCS.3.5.11-12A Standard PCS.3.5.11-12.B Standard PCS.3.5.11-12.C	12.A Standard PCS.3.6.11- 12.B	Standard PCS.2.1.HS.F.4 Standard
306	Perform basic math functions using decimal, percentages, fractions, conversions and measurements as related to the baking and pastry industry.  Perform equivalent measures associated with weight and volume including metric and English units.	OD AND NATURAL RESOURCES CLUSTER None listed	CRAFT AND STRUCTURE GRADES 9-10 Standard PCS.3.5.9-10.D.	PRODUCTION AND DISTRIBUTION OF WRITING	PCS.2.1.HS.F.5 Standard PCS.2.1.HS.F.6 Standard
		FOOD PROCESSING PATHWAY AG-FD-1 HOSPITALITY. &	Standard PCS.3.5.9-10.E Standard PCS.3.5.9-10.F GRADES 11-12 Standard PCS.3.5.11-12.D Standard PCS.3.5.11-12.E	GRADES 9-10 Standard PCS.3.6.9-10.C Standard PCS.3.6.9-10 D Standard PCS.3.6.9- 10.E	PCS.2.1.HS.F.7  OPERATIONS AND ALGEBRAIC THINKING Algebra
		TOURISM CLUSTER HT-1  RESTAURANT AND FOOD SERVICES	Standard PCS.3.5.11-12.F  INTEGRATE  KNOWLEDGE/ IDEAS	GRADES 11-12 Standard PCS.3.6.11-12 C Standard.PCS.3.6.11-	Standard PCS.2.2.HS.D.1 Standard PCS.2.2.HS.D.2 Standard
		PATHWAY HT-RFB 05 HT-RFB 06 HT-RFB 10	GRADES 9-10 Standard PCS.3.5.9-10.G Standard PCS.3.5.9-10.H	12.D Standard PCS.3.6.11- 12 E	PCS.2.2.HS.D.3. Standard PCS.2.2.HS.D.4

400	BAKING PREPARATION.		Standard PCS.3.5.9-10.I  GRADES 9-12  Standard PCS.3.5.11-12.G  Standard PCS.3.5.11-12.H  Standard PCS.3.5.11-12.I  RANGEOF  READING/LEVEL OF  COMPLEX TEXTS  GRADES 9-10  Standard PCS.3.5.9-10.J  GRADES 11-12  Standard PCS.3.5.11-12.J	RANGE OF WRITING GRADES 9-10 Standard PCS.3.5.9-10.I GRADES 11-12 Standard PCS.3.5.11- 12.I	Standard PCS.2.2.HS.D.5 Standard PCS.2.2.HS.D.6 Standard PCS.2.2.HS.D.7 Standard PCS.2.2.HS.D.8 Standard PCS.2.2.HS.D.9 Standard PCS.2.2.HS.D.9
401 402 403 404 405	Identify ingredients used in baking, describe their properties, and list the functions of various ingredients (including but not limited to: flours, sugars, fats, egg products and dairy).  Perform knife skills and classic cuts while practicing safety techniques.  Use and care for hand tools.  Describe and utilize various baking mixing methods and make-up techniques.	Refer to the end of this document for an explanation of the following standards and sample indicators:  CC TECH CORE STANDARDS:  AGRICULTURE/FO OD AND NATURAL RESOURCES CLUSTER None listed  FOOD PROCESSING PATHWAY AG-FD-3  HOSPITALITY. & TOURISM CLUSTER	KEY IDEAS/DETAILS GRADES 9-10 Standard PCS.3.5.9-10.A Standard PCS.3.5.9-10.B Standard PCS.3.5.9-10.C GRADES 11-12 Standard PCS.3.5.11-12A Standard PCS.3.5.11-12.B Standard PCS.3.5.11-12.C  CRAFT AND STRUCTURE GRADES 9-10 Standard PCS.3.5.9-10.D. Standard PCS.3.5.9-10.E Standard PCS.3.5.9-10.F GRADES 11-12 Standard PCS.3.5.11-12.D Standard PCS.3.5.11-12.E Standard PCS.3.5.11-12.E Standard PCS.3.5.11-12.E	TEXT TYPES/ PURPOSE  GRADES 9-10  Standard PCS.3.6.9-10.A  Standard PCS.3.6.9-10.B  GRADES 11-12  Standard PCS.3.6.11- 12.A  Standard PCS.3.6.11- 12.B  PRODUCTION AND DISTRIBUTION OF WRITING GRADES 9-10  Standard PCS.3.6.9-10.C  Standard PCS.3.6.9-10 D  Standard PCS.3.6.9-10 D  Standard PCS.3.6.9-10 D	NUMBERS AND OPERATIONS Standard PCS.2.1.HS.F.1 Standard PCS.2.1.HS.F.2 Standard PCS.2.1.HS.F.3 Standard PCS.2.1.HS.F.4 Standard PCS.2.1.HS.F.5 Standard PCS.2.1.HS.F.5 Standard PCS.2.1.HS.F.6 Standard PCS.2.1.HS.F.6

411	Write food requisitions for production requirements.	HT-1	INTECDATE	GRADES 11-12	
412	Use baking terms.	RESTAURANT AND FOOD SERVICES PATHWAY HT-RFB 02 HT-RFB 08 HT-RFB 10	INTEGRATE KNOWLEDGE/ IDEAS GRADES 9-10 Standard PCS.3.5.9-10.G Standard PCS.3.5.9-10.H Standard PCS.3.5.9-10.I GRADES 9-12 Standard PCS.3.5.11-12.G Standard PCS.3.5.11-12.H Standard PCS.3.5.11-12.I  RANGEOF READING/LEVEL OF COMPLEX TEXTS GRADES 9-10 Standard PCS.3.5.9-10.J GRADES 11-12 Standard PCS.3.5.11-12.J	Standard PCS.3.6.11-12 C Standard.PCS.3.6.11- 12.D Standard PCS.3.6.11- 12 E  RANGE OF WRITING GRADES 9-10 Standard PCS.3.5.9-10.I GRADES 11-12 Standard PCS.3.5.11- 12.I	
500	BAKING FUNDAMENTALS.				
501	Demonstrate proper scaling and measurement techniques used in baking.  Prepare yeast products (i.e. hard, and soft breads	Refer to the end of this document for an explanation of the	KEY IDEAS/DETAILS GRADES 9-10	TEXT TYPES/ PURPOSE	NUMBERS AND OPERATIONS Standard
302	and rolls).	following standards	Standard PCS.3.5.9-10.A	GRADES 9-10 Standard PCS.3.6.9-10.A	PCS.2.1.HS.F.1
503	Prepare enriched yeast dough products including laminated dough and sweet dough.	and sample indicators:	Standard PCS.3.5.9-10.B Standard PCS.3.5.9-10.C	Standard PCS.3.6.9-10.B	Standard PCS.2.1.HS.F.2
504	Prepare quick breads.	GG TEGU GODE	GRADES 11-12	GRADES 11-12	Standard
505	Prepare pies and tarts.	CC TECH CORE	Standard PCS.3.5.11-12A	Standard PCS.3.6.11-	PCS.2.1.HS.F.3
506	Prepare cookies.	STANDARDS:	Standard PCS.3.5.11-12.B	12.A	Standard PCS.2.1.HS.F.4
507	Prepare creams, mousses, custards, and related sauces.	AGRICULTURE/FO	Standard PCS.3.5.11-12.C	Standard PCS.3.6.11- 12.B	Standard
508	Prepare cakes.	OD AND NATURAL	CRAFT AND STRUCTURE		PCS.2.1.HS.F.5
509	Prepare icings and glazes.	RESOURCES CLUSTER	GRADES 9-10	PRODUCTION AND	Standard PCS.2.1.HS.F.6
510	Perform cake decorating techniques (i.e. icing- writing, borders, flowers, leaves, and rosettes).	None listed	Standard PCS.3.5.9-10.D.	DISTRIBUTION OF WRITING	Standard PCS.2.1.HS.F.7

511 512 513 514 515 516 517 518 519 520	Perform cake decorating techniques including: royal icing, rolled fondant, gum paste, air brush designs, and discuss edible images.  Discuss the applicability of convenience, value added, further processed or par-baked food items.  Prepare fillings and toppings for pastries and baked goods.  Prepare pastry products from pate choux, phyllo, puff pastry, and crepes.  Prepare French, Italian, and Swiss meringues.  Prepare doughnuts.  Prepare breakfast items/sandwiches.  Label and store bakery products to prevent or reduce spoilage and staling.  Discuss showpieces (i.e. gingerbread, chocolate, sugar, ice, and fruit carvings)	FOOD PROCESSING PATHWAY AG-FD-1, AG-FD-3  HOSPITALITY. & TOURISM CLUSTER None listed  RESTAURANT AND FOOD SERVICES PATHWAY HT-RFB 02 HT-RFB 08 HT-RFB 10	Standard PCS.3.5.9-10.E Standard PCS.3.5.9-10.F GRADES 11-12 Standard PCS.3.5.11-12.D Standard PCS.3.5.11-12.E Standard PCS.3.5.11-12.F  INTEGRATE KNOWLEDGE/ IDEAS GRADES 9-10 Standard PCS.3.5.9-10.G Standard PCS.3.5.9-10.H Standard PCS.3.5.9-10.I GRADES 9-12 Standard PCS.3.5.11-12.G Standard PCS.3.5.11-12.H Standard PCS.3.5.11-12.I  RANGEOF READING/LEVEL OF COMPLEX TEXTS GRADES 9-10 Standard PCS.3.5.9-10.J GRADES 11-12 Standard PCS.3.5.11-12.J	GRADES 9-10 Standard PCS.3.6.9-10.C Standard PCS.3.6.9-10 D Standard PCS.3.6.9-10 D Standard PCS.3.6.9- 10.E GRADES 11-12 Standard PCS.3.6.11-12 C Standard.PCS.3.6.11- 12.D Standard PCS.3.6.11- 12 E  RANGE OF WRITING GRADES 9-10 Standard PCS.3.5.9-10.I GRADES 11-12 Standard PCS.3.5.11- 12.I	
600	PURCHASING, RECEIVING, INVENTORY, AND STORAGE.				
601 602 603	List factors that affect food prices and quality, which may include market fluctuation and product cost.  Describe purchasing methods (i.e. bids, purchase orders, phone, sales quotes, online, etc.).  Identify regulations for inspecting and grading of bakery ingredients (i.e. flour, sugar, eggs, dairy products, and fruits).	Refer to the end of this document for an explanation of the following standards and sample indicators:	KEY IDEAS/DETAILS GRADES 9-10 Standard PCS.3.5.9-10.A Standard PCS.3.5.9-10.B Standard PCS.3.5.9-10.C GRADES 11-12	TEXT TYPES/ PURPOSE GRADES 9-10 Standard PCS.3.6.9-10.A Standard PCS.3.6.9-10.B GRADES 11-12	NUMBERS AND OPERATIONS Standard PCS.2.1.HS.F.1 Standard PCS.2.1.HS.F.2 Standard PCS.2.1.HS.F.3

604	Identify inventory systems including perpetual and	CC TECH CORE	Standard PCS.3.5.11-12A	Standard PCS.3.6.11-	Standard
	physical inventories and requisition systems for	STANDARDS:	Standard PCS.3.5.11-12.B	12.A	PCS.2.1.HS.F.4
	controlling costs (i.e. computerized systems).	A CIDICILII TURBURU	Standard PCS.3.5.11-12.C	Standard PCS.3.6.11-	Standard
		AGRICULTURE/FO		12.B	PCS.2.1.HS.F.5
		OD AND NATURAL RESOURCES	CRAFT AND STRUCTURE		Standard PCS.2.1.HS.F.6
		<u>CLUSTER</u>	GRADES 9-10	PRODUCTION AND	Standard
		None listed	Standard PCS.3.5.9-10.D.	DISTRIBUTION OF WRITING	PCS.2.1.HS.F.7
		EOOD DDOCEGGING	Standard PCS.3.5.9-10.E	GRADES 9-10	
		FOOD PROCESSING PATHWAY	Standard PCS.3.5.9-10.F	Standard PCS.3.6.9-10.C	
		AG-FD-3, AG-FD-4	GRADES 11-12	Standard PCS.3.6.9-10 D	
			Standard PCS.3.5.11-12.D	Standard PCS.3.6.9-	
		HOSPITALITY. &	Standard PCS.3.5.11-12.E	10.E	
		TOURISM CLUSTER	Standard PCS.3.5.11-12.F	GRADES 11-12	
		None listed		Standard PCS.3.6.11-12	
		RESTAURANT AND	INTEGRATE	С	
		FOOD SERVICES	KNOWLEDGE/ IDEAS	Standard.PCS.3.6.11-	
		PATHWAY	GRADES 9-10	12.D	
		HT-RFB 05	Standard PCS.3.5.9-10.G	Standard PCS.3.6.11- 12	
		HT-RFB 07	Standard PCS.3.5.9-10.H	E	
		HT-RFB 10	Standard PCS.3.5.9-10.I		
			GRADES 9-12	RESEARCH	
			Standard PCS.3.5.11-12.G	GRADES 9-10	
			Standard PCS.3.5.11-12.H	Standard PCS.3.6.9-10.F	
			Standard PCS.3.5.11-12.I	Standard PCS.3.6.9-10.G	
				Standard PCS.3.6.9-10.H	
			RANGEOF	GRADES 11-12	
			READING/LEVEL OF	Standard PCS.3.6.11-	
			COMPLEX TEXTS	12.F	
			GRADES 9-10	Standard PCS.3.6.11-	
			Standard PCS.3.5.9-10.J	12.G	
			GRADES 11-12	Standard PCS.3.6.11-	
			Standard PCS.3.5.11-12.J	12.H	
				RANGE OF WRITING	
				GRADES 9-10	

700	NUTRITION.	Refer to the end of	KEN IDEA CODETA II C	Standard PCS.3.5.9-10.I  GRADES 11-12  Standard PCS.3.5.11- 12.I	NUMBERS AND
701	List food groups and recommended servings in USDA Food Guide Charts.	this document for an	KEY IDEAS/DETAILS GRADES 9-10	TEXT TYPES/ PURPOSE	OPERATIONS
702	Discuss dietary guidelines and recommended dietary allowances for a nutritious diet.	explanation of the following standards	Standard PCS.3.5.9-10.A	GRADES 9-10	Standard PCS.2.1.HS.F.1
703	Define energy nutrients and non-energy nutrients and how they are metabolized by the human body.	and sample indicators:	Standard PCS.3.5.9-10.B Standard PCS.3.5.9-10.C	Standard PCS.3.6.9-10.A Standard PCS.3.6.9-10.B	Standard PCS.2.1.HS.F.2
704	Calculate your individual dietary intakes by using the RDA dietary guidelines.	CC TECH CORE	GRADES 11-12	GRADES 11-12 Standard PCS.3.6.11-	Standard PCS.2.1.HS.F.3
705	RESERVED	STANDARDS:	Standard PCS.3.5.11-12A Standard PCS.3.5.11-12.B	12.A	Standard
706	Interpret food labels in terms of the portion size, ingredients, nutritional value, and nutritional claims.	AGRICULTURE/FO	Standard PCS.3.5.11-12.C	Standard PCS.3.6.11- 12.B	PCS.2.1.HS.F.4 Standard
707	Describe the six classes of nutrients (carbohydrates, fats/lipids, protein, vitamins, minerals, and water).	OD AND NATURAL RESOURCES	CRAFT AND STRUCTURE	DDODLICTION AND	PCS.2.1.HS.F.5 Standard
708	Discuss the functions, sources, and effects of the six classes of nutrients on a healthy lifestyle.	CLUSTER None listed	<b>GRADES 9-10</b> Standard PCS.3.5.9-10.D.	PRODUCTION AND DISTRIBUTION OF	PCS.2.1.HS.F.6 Standard
709	Discuss various diets and health concerns related to: alternative dieting, vegetarianism, poor nutrition, and	FOOD PROCESSING	Standard PCS.3.5.9-10.E	WRITING GRADES 9-10	PCS.2.1.HS.F.7
710	food allergies. RESERVED	PATHWAY AG-FD-2	Standard PCS.3.5.9-10.F <i>GRADES 11-12</i>	Standard PCS.3.6.9-10.C	
711	Apply principles of nutrition and nutrient preservation		Standard PCS.3.5.11-12.D	Standard PCS.3.6.9-10 D Standard PCS.3.6.9-	
712	while preparing bakery goods and menu items. RESERVED	HOSPITALITY. & TOURISM CLUSTER	Standard PCS.3.5.11-12.E	10.E	
713	RESERVED	None listed	Standard PCS.3.5.11-12.F	GRADES 11-12 Standard PCS.3.6.11-12	
714 715	RESERVED RESERVED	RESTAURANT AND	INTEGRATE	C C	
716	RESERVED	FOOD SERVICES	KNOWLEDGE/ IDEAS	Standard.PCS.3.6.11-	
		PATHWAY HT-RFB 05	<i>GRADES 9-10</i> Standard PCS.3.5.9-10.G	12.D Standard PCS.3.6.11- 12	
		HT-RFB 08	Standard PCS.3.5.9-10.H	Е	
		HT-RFB 10	Standard PCS.3.5.9-10.I	RESEARCH	
			GRADES 9-12	<b>GRADES 9-10</b> Standard PCS.3.6.9-10.F	
			Standard PCS.3.5.11-12.G	Standard PCS.3.6.9-10.F	

<b>800</b> 801	BAKING PLANNING.  List basic production planning principles.	Refer to the end of	Standard PCS.3.5.11-12.H Standard PCS.3.5.11-12.I  RANGEOF READING/LEVEL OF COMPLEX TEXTS  GRADES 9-10 Standard PCS.3.5.9-10.J GRADES 11-12 Standard PCS.3.5.11-12.J	Standard PCS.3.6.9-10.G Standard PCS.3.6.9-10.H GRADES 11-12 Standard PCS.3.6.11- 12.F Standard PCS.3.6.11- 12.G Standard PCS.3.6.11- 12.H  RANGE OF WRITING GRADES 9-10 Standard PCS.3.5.9-10.I GRADES 11-12 Standard PCS.3.5.11- 12.I	NUMBERS AND
802 803	Create menu item descriptions for bakery goods.  Discuss baking facilities, planning, and layout	this document for an explanation of the	GRADES 9-10	PURPOSE	OPERATIONS
	principles.	following standards	Standard PCS.3.5.9-10.A Standard PCS.3.5.9-10.B	GRADES 9-10 Standard PCS.3.6.9-10.A	Standard PCS.2.1.HS.F.1
803	principles.  Discuss planning and time management as it relates to a baking facility.	following standards and sample indicators:	Standard PCS.3.5.9-10.A Standard PCS.3.5.9-10.B Standard PCS.3.5.9-10.C		

		HOSPITALITY. & TOURISM CLUSTER HT-1  RESTAURANT AND FOOD SERVICES PATHWAY HT-RFB 03 HT-RFB 05 HT-RFB 06 HT-RFB 07 HT-RFB 08 HT-RFB 10	Standard PCS.3.5.11-12.D Standard PCS.3.5.11-12.E Standard PCS.3.5.11-12.F  INTEGRATE KNOWLEDGE/ IDEAS GRADES 9-10 Standard PCS.3.5.9-10.G Standard PCS.3.5.9-10.H Standard PCS.3.5.9-10.I GRADES 9-12 Standard PCS.3.5.11-12.G Standard PCS.3.5.11-12.H Standard PCS.3.5.11-12.I  RANGEOF READING/LEVEL OF COMPLEX TEXTS GRADES 9-10 Standard PCS.3.5.9-10.J	Standard PCS.3.6.9- 10.E  GRADES 11-12 Standard PCS.3.6.11-12 C Standard.PCS.3.6.11- 12.D Standard PCS.3.6.11- 12 E  RANGE OF WRITING GRADES 9-10 Standard PCS.3.5.9-10.I GRADES 11-12 Standard PCS.3.5.11- 12.I	
			GRADES 11-12 Standard PCS.3.5.11-12.J		
900	HUMAN RELATIONS SKILLS.				
901 902 903 904 905	Work as a member of a diverse team as it relates to the baking industry.  Identify the benefits of a positive work environment by motivating employees, reducing stress, and resolving conflict.  Use professional communication (i.e. emails, phones, and social media)  Identify the baker's role in decision making, problem solving, and delegation of duties.  Identify current federal and state employment laws (i.e. Equal Opportunity, Harassment, Affirmative Action, Wage and Hour, etc.).	Refer to the end of this document for an explanation of the following standards and sample indicators:  CC TECH CORE STANDARDS:  AGRICULTURE/FO OD AND NATURAL	KEY IDEAS/DETAILS GRADES 9-10 Standard PCS.3.5.9-10.A Standard PCS.3.5.9-10.B Standard PCS.3.5.9-10.C GRADES 11-12 Standard PCS.3.5.11-12A Standard PCS.3.5.11-12.B Standard PCS.3.5.11-12.C	TEXT TYPES/ PURPOSE GRADES 9-10 Standard PCS.3.6.9-10.A Standard PCS.3.6.9-10.B GRADES 11-12 Standard PCS.3.6.11- 12.A Standard PCS.3.6.11- 12.B	

RESOURCES CLUSTER AG-1 FOOD PROCESSING PATHWAY AG-FD-1  HOSPITALITY. & TOURISM CLUSTER HT-4  RESTAURANT AND FOOD SERVICES PATHWAY HT-RFB 01 HT-RFB 04 HT-RFB 05 HT-RFB 06 HT-RFB 10	CRAFT AND STRUCTURE GRADES 9-10 Standard PCS.3.5.9-10.D. Standard PCS.3.5.9-10.E Standard PCS.3.5.9-10.F GRADES 11-12 Standard PCS.3.5.11-12.D Standard PCS.3.5.11-12.E Standard PCS.3.5.11-12.F  INTEGRATE KNOWLEDGE/ IDEAS GRADES 9-10 Standard PCS.3.5.9-10.G Standard PCS.3.5.9-10.H Standard PCS.3.5.9-10.I GRADES 9-12 Standard PCS.3.5.11-12.G Standard PCS.3.5.11-12.H Standard PCS.3.5.11-12.I  RANGEOF READING/LEVEL OF	PRODUCTION AND DISTRIBUTION OF WRITING GRADES 9-10 Standard PCS.3.6.9-10.C Standard PCS.3.6.9-10 D Standard PCS.3.6.9- 10.E GRADES 11-12 Standard PCS.3.6.11- 12.D Standard PCS.3.6.11- 12.D Standard PCS.3.6.11- 12 E  RESEARCH GRADES 9-10 Standard PCS.3.6.9-10.F Standard PCS.3.6.9-10.G Standard PCS.3.6.9-10.H GRADES 11-12 Standard PCS.3.6.11- 12.F
HT-RFB 01 HT-RFB 04 HT-RFB 05 HT-RFB 06	GRADES 9-10 Standard PCS.3.5.9-10.G Standard PCS.3.5.9-10.H Standard PCS.3.5.9-10.I GRADES 9-12 Standard PCS.3.5.11-12.G Standard PCS.3.5.11-12.H Standard PCS.3.5.11-12.I	12.D Standard PCS.3.6.11- 12 E  RESEARCH GRADES 9-10 Standard PCS.3.6.9-10.F Standard PCS.3.6.9-10.G Standard PCS.3.6.9-10.H GRADES 11-12 Standard PCS.3.6.11- 12.F Standard PCS.3.6.11- 12.G Standard PCS.3.6.11- 12.G Standard PCS.3.6.11- 12.H
		RANGE OF WRITING GRADES 9-10 Standard PCS.3.5.9-10.I GRADES 11-12 Standard PCS.3.5.11- 12.I

#### REFERENCE LIST

# COMMON CAREER TECHNICAL CORE STANDARDS, AND SAMPLE INDICATORS RELATED TO THE AGRICULTURE, FOOD AND NATURAL RESOURCES CAREER CLUSTER

## AG 1 Analyze how issues, trends, technologies and public policies impact systems in the Agriculture, Food and Natural Resources (AFNR) Career Cluster.

- a. Describe the major impacts of AFNR legislation.
- b. Describe the major regulations impacting the management of an individual resource.
- c. Identify situations that violate regulations.
- d. Identify significant issues that impact work assignment.
- e. List the potential economic, environmental and social costs and benefits of enacting sustainability initiatives in AFNR.
- f. Discuss the current applications of biotechnology in AFNR.
- g. Explain how biotechnology is used in specific AFNR activities.

# AG 2 Evaluate the nature and scope of the Agriculture, Food and Natural Resources Career Cluster and the role agriculture, food and natural resources play in society and the economy.

- a. Examine the role and major functions of AFNR organizations to better utilize AFNR guidelines.
- b. Explain the major guidelines used by AFNR organizations to manage and improve performance while maintaining ecosystem health.
- c. Examine economic, social and technological changes to spotlight their impact on AFNR organizations and the industry.
- d. Explain technological changes to reveal their impact on information technology and transportation.
- e. State the economic output of AFNR related industries in the United States.
- f. Evaluate the impact of AFNR activities in your local community.
- g. Explain the relationship between agriculture, food and natural resources.
- h. Identify ways in which the average person interacts with AFNR on a daily basis.

#### AG 3 Examine and summarize importance of health, safety and environmental management systems in AFNR organizations.

- a. Define what level of possible contamination or injury is considered a risk in order to set safety priorities.
- b. Assess mental and physical stresses to determine all aspects necessary to perform well and what health risks are associated with both the mental and physical aspects.
- c. Identify various emergency response plan requirements for a facility.
- d. Develop an emergency response plan for natural disasters.
- e. Identify general workplace safety hazards.
- f. Apply general workplace safety precautions/procedures.
- g. Acquire and maintain first aid certification.
- h. Acquire and maintain cardiopulmonary resuscitation (CPR) certification.
- i. Respond to medical emergencies.

- j. Explain purpose of pollution control systems.
- k. Describe procedures to comply with environmental regulations.
- 1. Maintain environmental health and safety facilities.
- m. Handle chemicals and safety equipment appropriately.
- n. Explain ergonomic procedures.
- o. Assess workplace safety.
- p. Assess a safety training plan.
- q. Observe all regulatory and safety standards.
- r. Study appropriate resources to identify the major regulatory areas (e.g., personal protective equipment) and government laws and regulations.
- s. Establish a set of safety, health and environmental principles to ensure a high level of performance.
- t. Develop a pollution/waste prevention plan to reduce or eliminate waste.
- u. Identify and describe common hazards in the workplace.
- v. Identify and describe major sources of information about hazards in the workplace (e.g., SDS, work procedures, exposure control plans, training materials, labels and signage).
- w. Identify sources of combustible/flammable materials, fire and emergencies to establish a fire safe environment.
- x. Interpret safety signs and symbols.
- y. Identify procedures necessary for maintaining a safe work area.
- z. Identify methods to correct common hazards.
- aa. Identify methods for disposing of hazardous materials.
- bb. Demonstrate principals of safe physical movement to avoid slips, trips and spills.
- cc. Inspect and use protective equipment (PPE).

#### AG 4 Demonstrate stewardship of natural resources in AFNR activities.

- a. Explain how personal choices are related to natural resource sustainability.
- b. Describe strategies to help an organization create a culture of natural resource stewardship.
- c. Predict the positive and negative impacts of given AFNR activities.

# AG 5 Describe career opportunities and means to achieve those opportunities in each of the Agriculture, Food and Natural Resources Career Pathways.

- a. Locate and interpret career information for at least one career cluster.
- b. Identify job requirements for career pathways.
- c. Identify educational and credentialing requirements for career cluster and pathways.
- d. Identify personal interests and aptitudes.
- e. Identify job requirements and characteristics of selected careers.
- f. Compare personal interests and aptitudes with job requirements and characteristics of career selected.
- g. Modify career goals based on results of personal interests and aptitudes with career requirements and characteristics.
- h. List examples of careers that require various levels of postsecondary education in each AFNR pathway.
- i. Explain the primary benefit of having a career in each of the AFNR pathways.

## AG 6 Analyze the interaction among ANFR systems in the production, processing and management of food, fiber and fuel and sustainable use of natural resources.

a. None applicable

## COMMON CAREER TECHNICAL CORE STANDARDS AND SAMPLE INDICATORS RELATED TO THE FOOD PROCESS AND PROCESSING SYSTEMS CAREER PATHWAY

#### AG-FD 1 Develop and implement procedures to ensure safety, sanitation and quality in food product and processing facilities.

- a. Outline procedures to eliminate possible contamination hazards associated with food products and processing.
- b. Develop and maintain a Standard Sanitation Operating Procedure (SSOP).
- c. Explain and demonstrate Good Manufacturing Practices (GMP).
- d. Perform equipment and facility maintenance in a food product and processing operation.
- e. Practice worker safety procedures.
- f. Explain techniques and procedures for safe handling of food products.
- g. Perform quality assurance tests on food products.
- h. Demonstrate approved food product handling techniques.
- i. Explain the importance of microbiological tests in food product preparation.

### AG-FD 2 Apply principles of nutrition, biology, microbiology, chemistry and human behavior to development of food products.

- a. Comply with and apply USDA/FDA standards.
- b. Use product development (e.g., consumer opinion, taste testing).
- c. Conduct nutritional analysis (e.g., biochemistry).
- d. Compare and contrast the nutritive value of food groups.
- e. Identify and compare various food constituents.
- f. Describe human behaviors related to food.
- g. Compare the nutritive value of food.
- h. Describe common food constituents (e.g., fats, vitamins, proteins)
- i. Explain how food constituents (proteins, minerals, etc.) contribute to product taste and appearance.
- i. Identify the required information for a food label.
- k. Explain the function of common food additives.
- 1. Predict the effects of altering a food product's formulation.

#### AG-FD 3 Select and process food products for storage, distribution and consumption.

- a. Prepare fresh food products for distribution and sale.
- b. Preserve foods through a variety of techniques.
- c. Select packaging for storage of processed foods.
- d. Evaluate storage conditions for food quality, shelf life and indented use.
- e. Assign quality grades and yield grades to food products according to industry standards.

f. Perform quality assurance inspections of raw food products.

#### AG-FD 4 Explain the scope of the food industry and the historical and current developments of food products and processing.

- a. Describe the role of producers, wholesale buyers, ingredient manufacturers, merchandisers, processors, distributors and retailers in the food industry.
- b. Explain the relationships among participants in the food industry for a given food product.

## COMMON CAREER TECHNICAL CORE STANDARDS AND SAMPLE INDICATORS RELATED TO THE HOSPITALITY AND TOURISM CAREER CLUSTER

#### HT 1 Describe the key components of marketing and promoting hospitality and tourism products and services.

- a. Identify the elements of marketing.
- b. Compare/contrast different marketing packets.
- c. Develop strategies for making a sale.
- d. Describe how economics applies to the hospitality and tourism industry.
- e. Discuss the importance of the hospitality and tourism industry to the U.S. economy.
- f. Explain the effects that supply and demand have on the hospitality and tourism industry.

#### HT 2 Evaluate the nature and scope of the Hospitality & Tourism Career Cluster and the role of hospitality and tourism in society and the economy.

- a. Define industry management terms including yield, yield management, no show, discount inventory control, overbooking and spoilage.
- b. Compare/contrast management of different organizational structures including independently owned, chain affiliated and corporations in the industry.
- c. Discuss the current trends in society and how they affect hospitality and tourism.

#### HT 3 Demonstrate hospitality and tourism customer service skills that meet customers' needs.

- a. Assess the importance of customer satisfaction.
- b. Devise strategies for maximizing customer satisfaction.
- c. Role play customer dissatisfaction scenarios.
- d. Describe how customer service affects a company's bottom line.

# HT 4 Describe employee rights and responsibilities and employers' obligations concerning occupational health and safety in the hospitality and tourism workplace.

- a. Identify key rights of employees related to occupational safety and health.
- b. Identify the responsibilities of employers related to occupational safety and health.
- c. Explain the role of government agencies in providing a safe workplace.
- d. Illustrate compliance with OSHA safety regulations and practices.
- e. Follow industry standards to comply with safety regulations and practices.
- f. Review safety and sanitation procedures applicable to the workplace.

# HT 5 Identify potential, real and perceived hazards and emergency situations and determine the appropriate safety and security measures in the hospitality and tourism workplace.

a. Create a solution to guest/customer exposure to a health hazard.

- b. Identify ways to manage guests/customers facing a threat.
- c. Identify ways to prevent common safety hazards.
- d. Develop and role-play mock emergency situations.
- e. Create a plan of action to manage guests with special needs (disabilities, handicap accessibility, etc.).
- f. Detail steps to use in medical emergencies.
- g. List resources for assistance with environmental issues.
- h. Name the resources for assistance in crimes or accidents.
- i. Detail how to access help in a terrorist situation.

#### HT 6 Describe career opportunities and means to attain those opportunities in each of the Hospitality & Tourism Career Pathways.

- a. Locate and interpret career information for at least one career cluster.
- b. Identify job requirements for career pathways.
- c. Identify educational and credentialing requirements for career cluster and pathways.
- d. Identify personal interests and aptitudes.
- e. Identify job requirements and characteristics of selected careers.
- f. Compare personal interests and aptitudes with job requirements and characteristics of career selected.
- g. Modify career goals based on results of personal interests and aptitudes with career requirements and characteristics.

# COMMON CAREER TECHNICAL CORE STANDARDS AND SAMPLE INDICATORS RELATED TO THE RESTAURANTS AND FOOD/BEVERAGE SERVICES CAREER PATHWAY

#### HT-RFB 1 Describe ethical and legal responsibilities in food and beverage service facilities.

- a. Detail ways to achieve a high rate of positive comments.
- b. Get regular feedback from guests and staff.
- c. Demonstrate understanding of legal interviewing processes.
- d. Outline how harassment and stereotyping can create an unhealthy work environment.
- e. Define legal and ethical responsibilities for safety procedures.
- f. Interpret worker's compensation requirements and forms.
- g. Identify ethical and legal situations that occur in the workplace.
- h. Relate appropriate response to legal/ethical infractions in the workplace.
- i. Integrate guidelines for ethical treatment in the workplace.
- j. Discuss how ethical issues and concerns affect a career field.

#### HT-RFB 02 Demonstrate safety and sanitation procedures in food and beverage service facilities.

- a. Outline compliance requirements of sanitation and health inspections.
- b. Show exemplary appearance and hygiene.
- c. Illustrate correct use of knives and kitchen equipment.
- d. Use protective gloves and clothing.

- e. Demonstrate correct food handling and production techniques.
- f. Practice appropriate safety and health procedures.
- g. Apply hazardous material practices and procedures for the handling and disposing of chemicals.

#### HT-RFB 03 Use information from cultural and geographical studies to guide customer service decisions in food and beverage service facilities.

- a. Identify ethnicities and their dining habits and rules.
- b. Identify countries and their native food resources.

### HT-RFB 04 Demonstrate leadership qualities and collaboration with others.

- a. Detail ways to minimize staff turnover.
- b. Conduct thorough orientation for new staff.
- c. Detail elements involved in new orientation.
- d. Explain human relations policies and procedures.
- e. Conduct regular reviews of staff.
- f. Utilize leadership skills to create motivation for change.
- g. Use people skills to build effective working relationships.
- h. Learn conflict management skills to facilitate solutions.

#### HT-RFB 05 Research costs, pricing, market demands and marketing strategies to manage profitability in food and beverage service facilities.

- a. Calculate food cost and determine ways to meet goals.
- b. Calculate labor cost and determine ways to meet goals.
- c. Determine the values of inventory or stock.
- d. Determine menu pricing.
- e. Define portion control.
- f. Develop promotional materials.
- g. Create method.
- h. Demonstrate awareness of operational needs.
- i. Demonstrate awareness of capabilities and limitations of the operation.

### HT-RFB 06 Explain the benefits of the use of computerized systems to manage food service operations and guest service.

- a. Demonstrate use of point of sale (POS) systems.
- b. Demonstrate basic computer applications.
- c. Demonstrate use of computer programs used for food production.

### HT-RFB 07 Utilize technical resources for food services and beverage operations to update or enhance present practice.

- a. Demonstrate the use of software programs for human resource management.
- b. Demonstrate the use of software programs for inventory control, point of sale, profit loss, etc.
- c. Access relevant websites.
- d. Download recipes.

e. Bookmark websites.

#### HT-RFB 08 Implement standard operating procedures related to food and beverage production and guest service.

- a. Detail operating procedures for food quality.
- b. Detail operating procedures for food presentation.
- c. Describe customer service table standards.
- d. Show consistent appearance in prepared foods.
- e. Detail ways to monitor quality of prepared food.
- f. Explain the use of a variety of sauces.
- g. Choose appropriate cooking procedures (sauté, broil, bake, etc.).
- h. Employ knowledge of nutritional values.
- i. Exhibit high quality food presentation.
- j. Detail characteristics of French, Russian, bistro style and other forms of service.
- k. Identify types of dining utensils and proper uses.
- 1. Show proper set up procedures for dining room/counter.
- m. Explain menu items.
- n. Detail the process of upselling and other forms of marketing at tableside.
- o. Use pots and pans for different food preparations.
- p. Explain how to store and retrieve foods in a variety of settings (cold, hot, dry, etc.).
- q. Explain the importance of the menu.
- r. Detail the menu's role in communicating an image.

#### HT-RFB 09 Describe career opportunities and qualifications in the restaurant and food service industry.

- a. Outline a plan for an effective job search.
- b. Write a resume that lists skills and competencies.
- c. Role-play a job interview.
- d. Explain follow up steps for a job interview.
- e. Develop a list of workplace rules and regulations.
- f. Identify and give examples of positive work attitudes.
- g. Make a list of qualities of successful food service employees.
- h. Identify hierarchy within the organization.
- i. List the qualifications for various careers in the food service industry.
- j. Describe major duties/tasks for each job option.
- k. Identify careers related to family and consumer sciences in the field of culinary arts.
- l. List various types of food service operations.
- m. List advantages/disadvantages of different sectors.

#### HT-RFB 10 Apply listening, reading, writing and speaking skills to enhance operations and customer service in food and beverage service facilities.

a. Recognize and respond to guests' needs and nonverbal cues.

- b. Interpret verbal and nonverbal behaviors to enhance communications with coworkers and customers/guests.
- c. Listen and understand others.
- d. Identify the problem and possible solutions and decide on a course of action to resolve unexpected situations.
- e. Provide feedback to management in order to enhance operations.
- f. Read and comprehend recipes, operational manuals, inventory control sheets, menus, correspondence, training manuals, etc.
- g. Create inventory control sheets, recipes, menus, correspondence, employee evaluations, etc.
- h. Calculate menu and recipe costs.