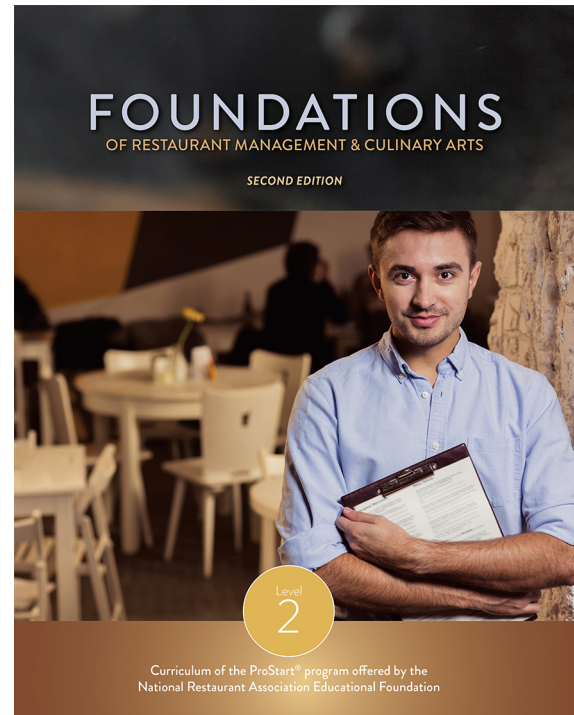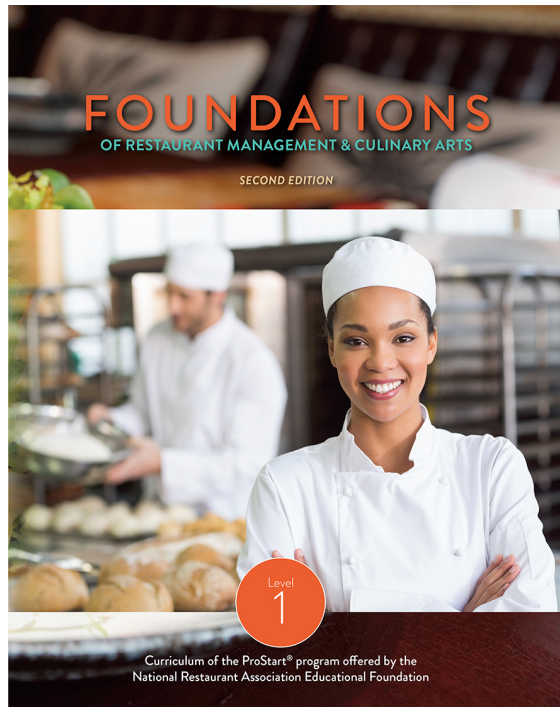A Correlation of

Foundations of Restaurant Management & Culinary Arts,
Second Edition
Level 2 ©2018

To the
Hawaii Department of Education
Career and Technical Education
Career Pathway: Public and Human Services
Culinary I

INTRODUCTION

This document demonstrates how well The National Restaurant Association's ***Foundations of Restaurant Management & Culinary Arts,*** **Second Edition, Level 2 © 2018** meets the Hawaii Department of Education Public and Human Services CTE Career Pathway standards for Culinary I (last modified October 31, 2012). The standards listed herein consist of specific competencies and skills established by the American Culinary Federation (ACF) as represented by NOCTI in its 2013 assessment blueprint for ACF culinary arts certification, which can be found online at http://www.nocti.org/PDFs/ACF/3990%20and%203991_Culinary_Arts.pdf. Correlation page references are to the Student Edition, and are cited at the page level.

The National Restaurant Association created the most comprehensive curriculum developed by industry and academic experts, ***Foundations of Restaurant Management & Culinary Arts,*** **Second Edition.** This two-level program provides comprehensive student resources and robust teacher materials to provide an in-depth, industry-driven learning experience.

- Each Level features blended coverage of culinary arts and management topics designed to build well-rounded skills for the workplace.

- 21st Century Learning objectives are taught and reinforced throughout the program; critical thinking and problem solving; communication and collaboration; creativity and innovation; global awareness; and health literacy.

- Curriculum of the ProStart® Program

Certification
Students can earn exclusive certificates from the National Restaurant Association that meet Carl Perkins funding requirements. Upon completion of each course, Levels 1 and 2, students are eligible to take the corresponding exam. Those that pass will receive a certificate of recognition from the National Restaurant Association.

Standard	Concept	Benchmark	*Foundations of Restaurant Management & Culinary Arts,* **Second Edition, Level 2 ©2018**
PLC 1.0 **Assess the impact of the inter-relationship between the culinary and hospitality industries to capitalize on sustainable and growth opportunities.**	**Culinary & Hospitality Industries**	**PLC 1.1** **Compare and contrast the impact of the culinary and hospitality industries for their role in the community.**	
		• Define the role of the culinary industry in the local and tourist community.	**SE:** n/a
		• Define the role of the hospitality industry in the local and tourist community.	**SE:** n/a
		• Analyze the impact of the inter-relationship of the culinary and hospitality industries in sustaining and growing opportunities in the local and tourist community.	**SE:** n/a
	Hawaiian Culture Values	**PLC 1.2** **Analyze the impact of "Hawaiian Culture Values" for sustaining and growing the culinary and hospitality industry such as** ▪ Spirit of Aloha ▪ Spirit of 'ohana ▪ Ho'okipa (hosting) ▪ Local cuisines	**SE:** n/a
PLC 2.0 **Analyze the impact of changes in food production and consumption on the evolution of the culinary industry.**	**Food Production**	**PLC 2.1** **Analyze the impact of food production changes on the availability of food sources in the culinary industry.**	
		• Analyze major changes in food production for their impact on the culinary industry. o Examine the evolution of growing and harvesting practices on crops, fish and animal food sources for their impact on the culinary industry.	**SE:** 59 (did you know), 62 (nutrition), 129, 318–322, 372–374
		o Examine the impact of technological changes on the availability of food sources for the culinary industry. ▪ Cooling food (Refrigeration, freezing, flash freezing) ▪ Preservation of food (canning, packaging, food additives) ▪ Transportation of food (ground, air, shipping)	**SE:** 230, 261, 275–277
		PLC 2.2 **Compare and contrast various culinary related industries for their role in food production.**	
		• Describe the role of the food research and development industry on food production.	**SE:** n/a
		• Examine the impact of the food manufacturing industry on food production.	**SE:** n/a
		• Examine the role of the food safety industry on food production.	**SE:** 48, 52, 59, 384–385, 406–407, 424–425

Standard	Concept	Benchmark	*Foundations of Restaurant Management & Culinary Arts,* Second Edition, Level 2 ©2018
PLC 2.0, *cont.*	**Contributors to the Industry**	**PLC 2.3** **Analyze the impact of major culinary innovators, institutions and innovations that have revolutionized the culinary industry internationally, nationally, and locally.**	
		• Analyze the impact of culinary innovators that have revolutionized the culinary industry such as ▪ Boulanger's Restaurant ▪ Auguste Escoffier ▪ Julia Childs ▪ Various Hawaii Chefs	**SE:** n/a
		• Analyze the impact of culinary institutions that have revolutionized the culinary industry such as ▪ Le Cordon Bleu ▪ The Culinary Institute of America ▪ Culinary Institute of the Pacific	**SE:** 204
		• Analyze the impact of culinary innovations that have revolutionized the culinary industry such as ▪ Media cooking and food shows ▪ Food movements (e.g., fusion cooking, farm to table, slow food, pop-up restaurants)	**SE:** 131, 259, 316–332
	Food Consumption	**PLC 2.4** **Analyze the inter-relationship of changing food consumption patterns and consumer demand for their impact on the culinary industry.**	
		• Analyze changes that impact food consumption patterns such as lifestyle choices, health-related preferences, food trends, and food cost.	**SE:** 181 (industry), 366–374
		• Analyze the impact of exposure to global cuisines, seasonings and flavors on consumer demand and the culinary industry.	**SE:** n/a
PLC 3.0 **Evaluate personal interests and strengths for compatibility with the skills and attitudes essential to varied culinary settings.**	**Food Service Settings**	**PLC 3.1** **Compare and contrast where and how food is served impacts the purpose, presentation, service, and cooking techniques.**	
		• Compare and contrast food service commercial facilities for their purpose, presentation, service, and cooking techniques such as ▪ Fine dining ▪ Family dining ▪ Fast food	**SE:** 28–29

		• Compare and contrast food service institutional facilities for their purpose, presentation, service and cooking techniques such as
		    ▪ Hospitals
		    ▪ Schools
		    ▪ Military
		    ▪ Religious Organizations
			SE: n/a

Standard	Concept	Benchmark	*Foundations of Restaurant Management & Culinary Arts,* **Second Edition, Level 2 ©2018**
PLC 3.0, *cont.*	**Occupation Compatibility**	**PLC 3.2** **Compare and contrast the modern brigade and non-brigade systems in the food service facilities to determine the skills and knowledge needed for compatibility with personal interests and strengths.**	

		• Analyze skills and knowledge needed in a modern brigade system to determine compatibility with personal interests, values, goals, and strengths.
		    ▪ Executive chef
		    ▪ Sous-chef
		    ▪ Area chef
		    ▪ Line Cooks
		    ▪ Pastry chef
		    ▪ Short order cook
			SE: n/a

		• Analyze the skills and knowledge needed in a non-brigade system to determine compatibility with personal interests, values, goals, and strengths.	**SE:** 285 (activity 5), 290–292, 399 (activity 5), 437 (activity 5)
	Professionalism: *Work Attitude Behavior Professional Growth*	**PLC 3.3** **Assess professional behavior and attitude for their impact on retention and promotion within the culinary industry.**	
		• Apply professional behavior skills in a culinary setting such as promptness, neatness, and organizational skills.	**SE:** n/a
		• Demonstrate a professional attitude in a culinary setting such as courtesy, adaptability, team-oriented, and service oriented attitude.	**SE:** 298–299
		• Assess life-long learning opportunities such as externships, trade periodicals, professional organizations, goal setting for their impact on retention and promotion within the culinary industry.	**SE:** n/a
		PLC 3.4 **Employ strategies to resolve issues and problems that arise in a stressful environment in the culinary industry.**	

		• Identify common stressful situations in the culinary setting that may impact physical, emotional and service ability of workers in the culinary industry.	**SE:** n/a
		• Identify solutions to issues and problems that lead to stress in the culinary industry.	**SE:** 244 (industry), 244–245, 247 (activity 1), 304–306

Standard	Concept	Benchmark	*Foundations of Restaurant Management & Culinary Arts,* **Second Edition, Level 2 ©2018**
PLC 4.0 **Apply effective communication that ensures quality service and promotes a positive work environment.**	**Communication** *Front of house & Back of house*	**PLC 4.1** **Compare and contrast communication skills and styles needed in the front of the house and back of the house in a culinary setting to ensure quality service and promote a positive work environment.**	
		• Identify the function and purpose of communication for the front of the house to promote quality service and a positive work environment. o Identify purpose of communication in the front of the house. o Identify the lines of communications employed in the front of the house. o Describe the communication skills needed when interacting with customers which promote positive outcomes. o Describe team work and co-worker interactions which promote positive outcomes. o Describe conflict resolution strategies that promote solutions and positive outcomes for the front of the house.	**SE:** n/a
		• Identify the function and purpose of communication for the back of the house that promotes quality service and promotes a positive work environment. o Identify purpose for which people communicate in the back of the house. o Identify the chain of command to expedite quality service using effective communication techniques. o Identify how precision of language and immediacy influences communication techniques to ensure quality service. o Describe conflict resolution strategies that promote solutions and positive outcomes for the back of the house.	**SE:** n/a
		• Compare and contrast communication skills needed to resolve conflicts used in the front of the house to the back of the house.	**SE:** n/a
		• Analyze the importance of acknowledging errors that impact the safety of food, customers, and co-workers.	**SE:** n/a

Standard	Concept	Benchmark	*Foundations of Restaurant Management & Culinary Arts, Second Edition, Level 2 ©2018*
PLC 4.0, *cont.*	*Speaking and Listening*	**PLC 4.2 Analyze effective speaking and listening skills and techniques to ensure quality service.**	
		• Use appropriate terminology, and precise language to communicate effectively.	**SE:** n/a
		• Use active listening skills such as reflection, restatement, and clarification techniques to communicate effectively.	**SE:** n/a
		• Determine ways to overcome barriers to communication.	**SE:** n/a
		• Follow directions and ask questions to effectively work and provide quality service.	**SE:** n/a
	Technical Reading	**PLC 4.3 Read and interpret a variety of culinary work-related documents to acquire pertinent technical terminology and information.**	
		• Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to the culinary industry.	**SE:** 56 (knowledge check), 69 (knowledge check), 322 (knowledge check), 399 (activity 2)
		• Execute directions from documents.	**SE:** n/a
		• Analyze information as related to the culinary industry.	**SE:** n/a
	Technical Writing	**PLC 4.4 Write technical information and ideas in a clear and industry appropriate style to convey information.**	

		• Compose written communications to convey and document information using correct culinary terminology, spelling and grammar.
		  ▪ Recipes
		  ▪ Menu orders
			SE: 234 (case study follow-up)

		• Prepare clear and coherent written documents in which the development, organization, and style are appropriate to task, purpose, and audience.	**SE:** 22 (activities 3, 4, 5, & 6), 26–38, 40 (all activities), 71 (activities 1 & 4), 86 (activity 4), 112 (activities 4 & 6), 145 (activities 4, 5, & 6), 213 (activity 6), 284 (activities 1 & 2), 285 (activity 5), 308 (activity 4), 334 (activities 1, 3, & 4), 354 (activity 5), 376 (activities 5 & 6), 399 (activities 4 & 6), 416 (activity 1), 456 (activity 4), 482 (activity 4)

Standard	Concept	Benchmark	*Foundations of Restaurant Management & Culinary Arts, Second Edition, Level 2 ©2018*
PLC 5.0 Integrate food safety and sanitation practices to prevent illness and contamination in a culinary setting.	**Food Safety**	**PLC 5.1 Compare and contrast biological, chemical and physical contaminates that affect food safety to ensure safe culinary environment.**	

		• Examine common biological microorganisms related to food spoilage and illness and their condition for growth to ensure safety of the culinary environment.
		  ▪ Bacteria (Salmonella/ E.coli / listeriosis /shigellosis)
		  ▪ Viruses (Hepatitis A/ Norovirus)
		  ▪ Parasites (protozoa/roundworms/flatworms)
		  ▪ Fungi (mold/yeast)
		  ▪ Toxins (seafood/ mushrooms)
			SE: 59 (safety), 62 (nutrition), 84 (safety), 128 (nutrition), 427 (did you know), 429 (safety)

		• Examine common chemical contaminates that affect food for their relationship to food safety.
		  ▪ Cleaning supplies (detergents/ hygiene detergents/ degreasers/ abrasive cleaners/ acid cleaners)
		  ▪ Pesticides
		  ▪ Food additives (some food preservatives/ MSG/ sulfites)
		  ▪ Toxic metals (lead, copper, zinc)
			SE: 371–373

		• Examine common physical contaminates that affect food safety.
		  ▪ Pests
		  ▪ Foreign objects (glass/wood/ hair/ metal shavings/nail polish)
			SE: n/a

		PLC 5.2 Analyze methods to prevent biological, chemical and physical contamination of food to ensure operations.	
		• Analyze the impact of HACCP (Hazard Analysis Critical Control Point) on the flow of food for consumer consumption.	**SE:** 424
		• Analyze proper food handling (raw and ready to eat) practices when receiving, storing, prepping, cooking, and delivery to consumers.	**SE:** 52–53, 56, 59, 69, 103, 130, 184 (activity 5), 228–232, 234 (activity 3), 271–277, 390–391, 408–409, 503 (activity 6), 493
		• Properly use and store chemical cleaners and pesticides.	**SE:** n/a
		• Use proper metal pots when cooking with certain ingredients.	**SE:** n/a
		• Analyze food additives that are healthy alternatives for safe consumption	**SE:** 366–371

| | | • Apply the fundamentals of good personal hygiene and professional dress to promote food safety. (i.e., hand washing techniques, proper dress, restraining hair, nail maintenance). | **SE:** n/a |
| | | • Acknowledge errors/ accidents that might impact food safety/ contamination. | **SE:** n/a |

Standard	Concept	Benchmark	*Foundations of Restaurant Management & Culinary Arts,* **Second Edition, Level 2 ©2018**
PLC 5.0, *cont.*	**Cleaning & Sanitation**	**PLC 5.3** **Apply proper cleaning and sanitation procedures to prevent illness and contamination.**	
		• Distinguish between cleaning and sanitation procedures for their impact in prevention of illness and contamination.	**SE:** n/a
		• Compare and contrast current types and proper uses of cleaning materials and sanitizer. ▪ Cleaning: detergents/ hygiene detergents/ degreasers/ abrasive cleaners/ ▪ acid cleaners ▪ Sanitizers: chlorine/ iodine/ quaternary ammonia	**SE:** n/a
		• Clean and sanitize utensils, equipment and facilities using proper procedure.	**SE:** n/a
PLC 6.0 **Integrate kitchen safety practices that ensure a safe working environment.**	**Kitchen Safety**	**PLC 6.1** **Analyze kitchen safety procedures to prevent and reduce kitchen related accidents.**	
		• Analyze the purpose of Occupational Safety and Health Administration (OSHA) as related to the culinary industry.	**SE:** n/a
		• Use proper body mechanics to prevent injury in the work place.	**SE:** n/a
		• Apply safe handling and care of equipment, tools and utensils to prevent injury.	**SE:** n/a
		• Analyze the purpose of the Material and Safety Data Sheets (MSDS) in the workplace to ensure safety.	**SE:** n/a
		• Describe the various types of kitchen fires and proper extinguishing techniques. ▪ Class A (wood, paper, cloth, plastic) ▪ Class B (Grease, oil, chemicals) ▪ Class C (Electrical cords, switches, wiring) ▪ Class D (combustible switches, wiring, metals, iron) ▪ Class K (Fires in cooking appliances involving combustible vegetables, animal oils/fats)	**SE:** n/a

		PLC 6.2 **Recognize and respond to emergency situations that may occur in the work place.**	
		• Analyze common injuries and response procedures for knife cuts and burns.	**SE:** n/a
		• Recognize when there is a need to call 911 in an emergency situation.	**SE:** n/a

Standard	Concept	Benchmark	*Foundations of Restaurant Management & Culinary Arts,* **Second Edition, Level 2 ©2018**
PLC 7.0 Analyze and apply mathematical concepts to solve problems in a culinary setting.	**Quantitative Reasoning**	**PLC 7.1 Apply appropriate quantitative reasoning skills to inform decision-making and solve problems.**	
		• Calculate equivalencies for capacity, volume, weight, liquid and dry measurements.	**SE:** 86 (activity 3), 112 (activity 3), 219–224, 235 (activity 4), 334 (activity 1), 354 (activity 3), 399 (activity 3), 437 (activity 3), 456 (activity 3), 503 (activity 3), 520 (activity 3)
		• Calculate equivalencies of metric units to U.S. customary units commonly used in culinary for capacity, volume, weight, liquid and dry measurements.	**SE:** n/a
		• Use calculations for recipe yield conversions.	**SE:** 144 (activity 3), 184 (activity 3), 223–224, 482 (activity 3)
		• Use calculations for recipe portion size conversions.	**SE:** 221–222
		• Use calculations to determine food, supply and unit costs.	**SE:** 37–38, 219–220, 278–280, 284–285 (activity 3)
PLC 8.0 Apply food preparation and cooking techniques to execute standard recipes for consumption.	*Food Preparation and Technique*	**PLC 8.1 Apply proper technique in the use of tools and equipment to execute recipes.**	
		• Use proper tools and equipment or appropriate substitutes to cook and bake various dishes for consumption. ○ Distinguish among proper tools and equipment to execute a recipe ■ hand tools (i.e., spoons/ peeler/ whisks/tongs/ strainers/ spatulas/grater) ■ measurement tools (scale/ volume/ liquid/ ladles/ measuring spoons) ■ cookware (i.e., stockpot, sauce pan, roasting pans, various hotel size pans, baking sheets, mixing bowls, pie pan etc).	**SE:** 65 (essential skills), 68 (essential skills), 69 (essential skills), 80–81, 82 (essential skills), 104, 105 (essential skills), 110 (essential skills), 131–133, 141, 155–158, 174–176, 180 (essential skills), 388 (essential skills), 394, 397 (essential skills), 410 (essential skills), 411 (essential skills) 414, 431 (essential skills), 432 (essential skills), 450–453, 467–471, 473, 476–480, 494–495, 497–498, 515, 516

		• Differentiate and use the following knives to apply proper technique for preparation of recipe. It is recommended that all students be proficient in the use of the following:
		▪ Chef knife (8" or 10")
		▪ Paring knife
		▪ Slicer
		▪ Boning knife
		▪ Fillet knife
		▪ Butcher knife
		    • Apply the following cuts in a safe manner and with minimal waste of food product
		    √ Dice (small, medium, large)
		    √ Julienne
		    √ Stew Cut
			SE: 104–105, 131, 133, 388, 432, 515

Standard	Concept	Benchmark	*Foundations of Restaurant Management & Culinary Arts,* **Second Edition, Level 2 ©2018**
PLC 8.0, *cont.*	*Cooking Methods*	**PLC 8.2** **Apply proper use of ingredients and cooking methods to prepare food for consumption.**	

		• Analyze interaction of ingredients for their effect on flavor, texture and consistency of food preparation.
		  o Evaluate ingredients for their effect on the outcome of recipe.
		  o Determine when and why substitute ingredients may be used to implement a recipe.
		  o Compare and contrast "states" of ingredients: solid, liquid, gas for their outcome of a recipe.
		  o Evaluate different types of seasonings, oils, leveners for their use and outcome of a recipe.
			SE: 366–371, 448–451, 456 (activities 1, 2, & 3), 465 (nutrition), 482 (activities 2 & 6), 503 (activity 3), 510–512

		• Apply the appropriate mixing methods to combine ingredients using the proper hand tool or equipment. ▪ Stirring ▪ Kneading ▪ Folding ▪ Cutting ▪ Blending ▪ Whipping ▪ Sifting	**SE:** 450–454, 458–461, 467–471, 473, 476–480, 484–487, 497–498, 505–507
		• Apply the following cooking methods to prepare a variety of food for consumption. ▪ Dry method (Grilling/ sauté/ pan fry)	**SE:** 107–109, 133–141, 392–393, 410, 412, 414, 433–435

▪ Moist method (poach, steam, simmering) ▪ Combination method (Braising, stewing)	

• Apply baking methods to execute the following:
     ▪ Quick breads
     ▪ Cakes
     ▪ Cookies
	SE: 448–461 (entire chapter including summary, activities, and recipes), 464, 482 (activity 3), 484, 486, 506

• Apply food preparation techniques and/or cooking methods to execute the following:
     ▪ Salads
     ▪ Soups
     ▪ Hors d'oeuvres
	SE: 124–125, 366, 367 (essential skills)

Standard	Concept	Benchmark	*Foundations of Restaurant Management & Culinary Arts,* *Second Edition, Level 2 ©2018*
PLC 8.0, *cont.*	*Cooking Methods,* **cont.**	**PLC 8.3** **Execute standard recipes using the proper ingredients, equipment, tools and techniques to prepare food for consumption.**	

		• Plan and apply steps and manage time to execute recipes.
		   o Read and analyze recipes to determine if changes must be made with regards to the following: ingredients substitutions, yield conversions or portion size.
		   o Analyze work simplification techniques that address implications of food, time and energy for effective *mise en place.*
		   o Follow proper procedure of standard recipes to prepare and combine ingredients using proper technique.
		   o Apply proper cooking or baking methods to execute a recipe.
			SE: 73–75, 86 (activity 2), 88–91, 114–117, 144 (activity 3), 147–149, 186–189, 221, 223–224, 234 (case study follow-up), 235 (activity 4), 284–285 (activity 3), 366–371, 401–403, 419–421, 439–441, 458–461,482 (activity 3), 484–487, 505–507

		• Evaluate outcome of recipes.
		   o Analyze taste, consistency, texture, appearance, and portion size of recipe.
		   o Provide possible solutions to modify recipe if needed.
			SE: 366–371

PLC 9.0 **Develop menus and execute recipes that meet the needs of a specific customer.**	**Menu planning**	**PLC 9.1** **Create menus for various purposes to meet the needs of customers.**	

		• Determine the style of dining that will meet the needs of customer.
		   o Plan the menu
		     ▪ Elicit feedback from customer
		     ▪ Revise menu based upon customer feedback
		       ▪ Adjust ingredients to meet the needs of customer
			SE: 26–41 (entire chapter including summary, activities, & exam prep)

▪ Adjust the portion size to meet the needs of customer o Choose recipes to execute menu o Determine the presentation style of menu items o Establish how food will be served	
• Implement the proper ingredients, tools and equipment to execute recipes on menu. o Follow procedures of recipes and implement mise en place to execute properly timed menu items. o Apply the proper cooking methods, techniques and baking methods to execute menu. o Plate food in the presentation style that suits the customer's needs.	**SE:** 30, 31, 511–515

Standard	Concept	Benchmark	*Foundations of Restaurant Management & Culinary Arts,* **Second Edition, Level 2 ©2018**
9.0, *cont.*	**Menu planning,** *cont.*	**PLC 9.1,** *cont.* • Serve food to customer in a timely manner. o Apply professional behavior and attitude when interacting with the customer and co-workers.	**SE:** 34 (essential skills)
		• Evaluate the outcome of menu o Collect feedback from customer o Provide possible solutions to modify menu for future reference.	**SE:** 34–37
PLC 10.0 Integrate legal and ethical principles in daily operations to make informed decisions that reduce risk and limit liability.	**Legal & Ethics**	**PLC 10.1** **Analyze legal and ethical behaviors affecting the decisions in the culinary industry.**	
		• Evaluate common ethical practices within the culinary industry to foster proper behaviors in the workplace.	**SE:** n/a
		• Examine legal and ethical behaviors in the culinary industry that protects the consumer.	**SE:** n/a
		• Describe the purpose of regulatory organizations (i.e. Americans with Disabilities Act, Food and Drug Administration, United States Department of Agriculture) in order to make appropriate decisions relating to clients.	**SE:** n/a
Standards were received upon request via email on June 13, 2017 from Michael_Barros/CIB/HIDOE@notes.k12.hi.us and were dated October 31, 2012.			