

CENTRAL NEW MEXICO COMMUNITY COLLEGE
ASSESSMENT REPORT
Due to SAAC by October 15

PART 1: CONTACT & PROGRAM IDENTIFICATION

Report Year and Contact Information:			
Fall 2015- Spring 2016	Kerry Logan/ Andrea Schulte	klogan7@cnm.edu/aschulte2@cnm.edu	505.224.4000 ext. 50144/52414
Academic Year	Contact Person	Email	Phone Number

Subject of this Assessment Report:		
Program: Culinary Arts (Baking and Pastry Concentration) <input type="checkbox"/> Certificate <input type="checkbox"/> AA <input type="checkbox"/> AS <input checked="" type="checkbox"/> AAS	Program: Baking (Embedded) <input checked="" type="checkbox"/> Certificate <input type="checkbox"/> AA <input type="checkbox"/> AS <input type="checkbox"/> AAS	Discipline Area: Gen Ed Area:

PART 2: EVIDENCE OF ACHIEVEMENT OF PROGRAM OUTCOMES

Summary of Program Success in Achieving Desired Outcomes:
<p>The Culinary Arts Program is accredited by the American Culinary Federation Education Foundation Accrediting Commission. This ensures that the program meets the standards and competencies set for faculty, curriculum and student services. Our practices are aligned with industry practices and our faculty maintain a high level of professionalism. Many of our students work in the industry and volunteer at industry related events. Industry partners include: Hyatt Regency, Heritage Hotels, Savory Faire, Scalo Northern Italian Grill, Season’s, Savoy, The Artichoke Café, Farina Alto, Shamrock Foods, Andaluz Hotel, Isleta Casino and Resort, Artichoke Café, Zinc Wine Bar & Bistro, the Street Food Institute, Starbucks Coffee, Flying Star, Coldstone Creamery, Marriott, Passion Fusion, and many more. Chef Andrea Schulte hires CNM graduates of the Baking & Pastry Program at her bakery, New Mexico Pie Company.</p> <p>We work with the New Mexico Restaurant Association, and are supporting ProStart; the high school culinary education program, as well as having faculty serve as judges for local culinary competitions like, ‘Duke it Out,’ and ‘Food Fight.’ CNM Culinary Instructors are featured on local television programming, which also serves the community with food safety, and acts as additional marketing for our programs. We have many Instructors and Technicians who are ServSafe Certified. Groups of students have heard guest speakers, like Produce Expert, Dave Mineman, and Chefs Antonia Lofaso and Fabio Viviani. In conjunction with our new Brewing program, the Culinary Program offered a food and beer, and food and wine, affinities meal to the public and brewers from local micro-breweries. We are offering classes in conjunction with The Street Food Institute from Santa Fe, in Mobil Food Operations that have been successful and resulted in graduates starting their own food truck business. We continue to obtain new equipment, and have outfitted two of our labs with new product or equipment being used by the Brewing class, and our Dining Room class.</p>

The Baking and Pastry Program at Central New Mexico Community College takes great pride in offering excellent quality of instruction and attention to detail to the science of baking and pastry arts.

Our classes focus specifically on Baking and Pastry theory, method, technique, artistry and presentation giving students the foundation required for a successful culinary arts career.

Our in-depth program and Lab classes expose our students to the complete learning experience, starting with the most basic baking skills and moving through to exciting advanced techniques. Our program is designed and created to meet the strict American Culinary Federation curriculum. We are excited to be a significant part of future pastry professionals and their success in the industry.

Description and Evaluation of Recent Changes Made in Support of Student Learning:

CNM's Culinary Arts Program is developing a Craft/Brewing program that has shown to be in demand by the local Microbrewery Industry.

The Mobile Food Operations Program continues to develop and test new recipes for sale to the general public, and to be a program that students are showing high interest in enrolling in.

Our method for ordering supplies for the labs has changed recently. This effort included cleaning and organizing the labs and the main Store Room areas, as well as specific responsibilities for the Storeroom Supervisor, the Instructional Technicians, and the Instructors.

A new Lab Supervisor was recently hired, and more complete data will be included in next year's report. We hope the results will be more efficient utilization of ingredients, lower food cost, and time saving.

The programs in culinary arts have begun a much more effective recycling and composting program that is taught to students so they can learn the benefits of 'going green.' We fully implemented our green-sustainability initiative with a contract with a company that provides us with Green Compost Bins each week. We have found that a large percentage of the culinary arts program waste is compostable, or recyclable. To this end, we have dramatically lowered the amount of garbage being sent to the landfill. We are saving money on the purchase of plastic garbage can liners and plastic ware, while improving the sustainability of the planet, and teaching the future cooks, bakers, chefs, and owners of the benefits of being a Green Property.

Being nationally accredited by the ACFEFAC is no small undertaking and assures that the CNM Culinary Arts programs are meeting the standards and competencies set for faculty, curriculum, and student services. Accreditation creates public trust by ensuring established standards, accountability and credibility, a high level of professionalism, up-to-date and current practices nation-wide, and provides CNM with marketing tools for recruiting new students, as well as having the ACFEF accreditation acting as a third party endorser for federal funding. Our accrediting agency is recognized by the, Council on Higher Education Accreditation (CHEA).

Baking and Pastry Program:

We continue to follow the American Culinary Federations required Curriculum direction.

As suggested by the ACF Evaluation Team we have implemented a Feedback-Critique Sheet Form for all Baking students to use with all completed baked products.

It is used as an evaluation and feedback tool for all items students have produced in 1130/1132 Baking Lab classes.

There is a new course being offered as part of the AAS degree, Retail Baking Operations, which focuses on retail merchandising, cash handling, marketing, POS systems and selling of products in a retail bakery operation setting.

PART 3: REPORT ON RECENT ASSESSMENT OF STUDENT LEARNING PROCESSES

Learning Outcome(s)/Exit Competencies Assessed: <i>To add rows: right –click in cell below and select “Insert,” “Insert Rows Above”</i>	Classes/Cohorts Assessed:
(1) Demonstrate the ability to prepare a variety of hot and cold food products according to standard recipes as well as application of basic cooking methods using proper knife, tool, and equipment techniques.	CULN 1110 Fall 2015 and Spring 2016 CULN 1112 Fall 2015 and Spring 2016 (Degree only)
(2) Demonstrate knowledge of the fundamentals of baking science by preparing a variety of products according to standard recipes using proper hand tools and equipment and techniques.	CULN 1130 Fall 2015 and Spring 2016 CULN 1132 Fall 2015 and Spring 2016
(3) Demonstrate hygiene and sanitation standards in a kitchen setting. Describe basic principles of sanitation, safety, and procedures to determine and monitor critical control points in a professional food service setting.	CULN 1003 Fall 2015 and Spring 2016 CULN 1103 Fall 2015 and Spring 2016 CULN 1110 Fall 2015 and Spring 2016 CULN 1112 Fall 2015 and Spring 2016 (Degree only) CULN 1132 Fall 2015 and Spring 2016
(4) Demonstrate Baking and Pastry skills with more advanced decorating techniques, more complex preparations of pastry, confections and dessert products.	CULN 2232 Fall 2015 and Spring 2016
(7) Describe and evaluate procedures for proper receiving, storage, and control of food and non-food items; apply knowledge and quality standards and regulations to purchasing decisions. (Degree only)	CULN 1003 Fall 2015 and Spring 2016 CULN 1103 Fall 2015 and Spring 2016 HT 2215 Fall 2015 and Spring 2016 (Degree only)

Measurement Tool(s) Used: <i>To add rows: right –click in cell below and select “Insert,” “Insert Rows Above”</i>	<i>Enter X's for type of tool</i>				Initial Achievement Target or Expectation:
	Internal	External	Direct	Indirect	
(1) Practical Cooking finals using standardized rubrics	X		X		Rubric score: 75% of students achieve score of 3 or higher
(2) Practical Baking Finals using Rubrics	X		X		Rubric score: 75% of students achieve score of 3 or higher

(3) Practical Cooking finals using standardized rubrics (hygiene/sanitation standards)	X		X	Rubric score: 75% of students achieve score of 3 or higher
(3) ServSafe Food Manager Standardized Exam (total score)		X	X	80% of students taking exam pass (i.e. score 75% or higher)
(4) Advanced Baking Finals using Rubrics	X		X	Rubric score: 75% of students achieve score of 3 or higher
(7) ServSafe Food Manager Standardized Exam (domain score for Receipt/Storage/Transport of food) (Degree and FSMG certificate only)		X	X	75% of students score 75% or higher on domain score for Receipt/Storage/Transport of food on ServSafe Food Manager Standardized Exam
(7) Targeted exam/homework questions (Degree and FSMG certificate only)	X		X	Rubric score: 75% of students achieve score of 3 or higher

Assessment Results/Findings:

Outcome #1 (Cooking): Demonstrate the ability to prepare a variety of hot and cold food products according to standard recipes as well as application of basic cooking methods using proper knife, tool, and equipment techniques

Practical cooking rubric: CULN 1110, CULN 1112

Performance or Objective	Below CNM Standards 0	Beginning 1	Developing 2	Accomplished 3	Exemplary 4
Demonstrate the ability to prepare a variety of hot and cold food products.	Is not able to produce food that is safe to eat, flavorful, cooked correctly, and/or presented properly within class time.	Less than 50% of the time, produces food that is safe to eat, flavorful, cooked correctly, and presented properly within class time.	More than 50% of the time produces food that is safe to eat, flavorful, cooked correctly, and presented properly within class time.	At least 75% of the time produces food that is safe to eat, cooked correctly, flavorful, and presented properly within class time.	With a professional sense of urgency, consistently produces food that is safe to eat, cooked correctly, flavorful, properly and creatively presented, within class time, and adopt problem-solving techniques to achieve this.

Demonstrate the ability to read recipes and successfully produce the correct end-product.	Is not able to read recipes and successfully produce the correct end-product.	Less than 50% of the time, can read and successfully complete recipes within class time.	More than 50% of the time is able to read and successfully complete recipes within class time.	At least 75% of the time is able to read and successfully complete recipes within class time.	With a professional sense of urgency, is consistently able to read and successfully produce end-results from recipes, and adopt problem-solving techniques to achieve this.
Demonstrate correct knife, tool, and equipment skills and techniques.	Is not able to correctly and safely use knives, tools, & equipment.	Correctly and safely uses knives, tools, & equipment less than 50% of the time.	Correctly and safely uses knives, tools, & equipment more than 50% of the time.	Correctly and safely uses, and maintains, knives, tools, & equipment at least 75% of the time.	With a professional sense of urgency, consistently uses, sharpens and maintains knives, tools, and equipment correctly, and adopt problem-solving techniques to achieve this.

Results (all sections reporting; target: 75% of students scoring a “3” or “4” on rubric):

Results:

Competency area: Demonstrate the ability to prepare a variety of hot and cold food products.							
Performance level						Term	Course
0	1	2	3	4	total		
1	3	7	23	43	77	Fall 2015	CULN 1110
1	0	1	17	20	39	Fall 2015	CULN 1112
0	0	0	7	6	13	Fall 2015	CULN 2214
0	0	8	27	24	59	Spring 2016	CULN 1110
2	2	3	11	20	38	Spring 2016	CULN 1112
0	0	4	4	5	13	Spring 2016	CULN 2214
4	5	23	89	118	239		
86.6%						meeting target (3 or 4)	

Competency area: Demonstrate the ability to read recipes and successfully produce the correct end-product.							
Performance level							
0	1	2	3	4	total	Term	Course
1	3	10	17	46	77	Fall 2015	CULN 1110
1	0	2	16	20	39	Fall 2015	CULN 1112
0	0	0	6	7	13	Fall 2015	CULN 2214
0	1	7	24	27	59	Spring 2016	CULN 1110
2	2	3	11	20	38	Spring 2016	CULN 1112
0	0	3	5	5	13	Spring 2016	CULN 2214
4	6	25	79	125	239		
					85.4%	meeting target (3 or 4)	

Competency area: Demonstrate correct knife, tool, and equipment skills and techniques.							
Performance level							
0	1	2	3	4	total	Term	Course
1	2	9	13	52	77	Fall 2015	CULN 1110
0	0	1	16	22	39	Fall 2015	CULN 1112
0	0	0	4	9	13	Fall 2015	CULN 2214
0	1	10	33	15	59	Spring 2016	CULN 1110
0	0	5	13	20	38	Spring 2016	CULN 1112
0	0	1	3	9	13	Spring 2016	CULN 2214
1	3	26	82	127	239		
					87.4%	meeting target (3 or 4)	

Outcome # 2 (Baking) Demonstrate knowledge of the fundamentals of baking science by preparing a variety of products according to standard recipes using proper hand tools and equipment and techniques.

<u>Outcomes Assessment-Student</u>					
Performance or Objective	Below CNM Standards 0	Beginning 1	Developing 2	Accomplished 3	Exemplary 4
Demonstrate the ability to prepare a variety of Baked Products	Is not able to produce food that is salable, scaled and baked correctly, and presented properly within class time.	Less than 50% of the time, produces food that is salable, scaled and baked correctly, and presented properly within class time.	More than 50% of the time produces food that is salable, scaled and baked correctly, and presented properly within class time.	At least 75% of the time produces food that is salable, scaled and baked correctly, flavorful, and presented properly within class time.	With a professional sense of urgency, consistently produces food that is salable, scaled and baked correctly, and produced within class time. Problem-solving techniques to achieve this was evident.
Demonstrate the ability to read formulas and successfully produce the correct end-product.	Is not able to read formulas and successfully produce the correct end-product.	Less than 50% of the time, can read and successfully complete formulas within class time.	More than 50% of the time is able to read and successfully complete formulas within class time.	At least 75% of the time is able to read and successfully complete formulas within class time.	With a professional sense of urgency, is consistently able to read and successfully produce end-results from formulas, and adopt problem-solving techniques to achieve this.
Demonstrate correct knife, tool, and equipment skills and techniques.	Is not able to correctly and safely use knives, tools, & equipment.	Correctly and safely uses knives, tools, & equipment less than 50% of the time.	Correctly and safely uses knives, tools, & equipment more than 50% of the time.	Correctly and safely uses, and maintains, knives, tools, & equipment at least 75% of the time.	With a professional sense of urgency, consistently uses, sharpens and maintains knives, tools, and equipment correctly, and adopt problem-solving techniques to achieve this.

Results:

Competency area: Demonstrate the ability to prepare a variety of baked products.							
Performance level							
0	1	2	3	4	total	Term	Course
0	1	4	10	24	39	Fall 2015	CULN 1130
0	0	0	11	23	34	Fall 2015	CULN 1132
0	0	3	4	9	16	Spring 2016	CULN 1130
0	0	3	4	9	16	Spring 2016	CULN 1132
0	1	10	29	65	105		
					89.5%	meeting target (3 or 4)	

Competency area: Demonstrate the ability to read formulas and successfully produce the correct end-product.							
Performance level							
0	1	2	3	4	total	Term	Course
0	1	5	10	23	39	Fall 2015	CULN 1130
0	0	0	12	22	34	Fall 2015	CULN 1132
0	0	3	5	8	16	Spring 2016	CULN 1130
0	0	3	5	8	16	Spring 2016	CULN 1132
0	1	11	32	61	105		
					88.6%	meeting target (3 or 4)	

Competency area: Demonstrate correct knife, tool, and equipment skills and techniques.							
Performance level							
0	1	2	3	4	total	Term	Course
0	1	3	12	23	39	Fall 2015	CULN 1130
0	0	0	7	27	34	Fall 2015	CULN 1132
0	0	3	4	9	16	Spring 2016	CULN 1130
0	0	3	4	9	16	Spring 2016	CULN 1132
0	1	9	27	68	105		
					90.5%	meeting target (3 or 4)	

Outcome #3 (Safety and Sanitation): Demonstrate hygiene and sanitation standards in a kitchen setting. Describe basic principles of sanitation, safety, and procedures to determine and monitor critical control points in a professional food service setting.

Practical sanitation rubric: CULN 1110, CULN 1112, CULN 1132

	<u>Below CNM Standards</u> 0	<u>Beginning</u> 1	<u>Developing</u> 2	<u>Accomplished</u> 3	<u>Exemplary</u> 4
Uniform and Hygiene	Evidence that student is unaware of uniform requirements or proper hygiene procedures	More than two modifications to uniform or person was necessary	Two modifications were needed (complete uniform not present, personal hygiene not satisfactory)	Uniform was clean and complete at least 90 % of the time.	On a regular basis, the student arrived to class in complete uniform clean and pressed, hair fully restrained, hand and nails clean and trimmed
Workstation	Evidence that student is unaware of proper station setup and/or sanitation standards	Poorly maintained, cross contamination and/or unsanitary conditions present. Tools not cleaned/ sanitized between use.	Not well maintained during observation, some knowledge present. Several incidences of unclean/ not sanitized tools/equipment	Moderately clean work space, one or two incidences of issues of unclean/ not sanitized tools equipment	Exceptional clean and sanitary area, no cross contamination evidence or unsanitary conditions
Tools and Equipment	Evidence student unaware of safe and/or proper use of tools and equipment	Improper use of tools and/or equipment was shown	More than two observations made of careless or improper use of tools and equipment	Illustrated proper use of tools and equipment in a safe manner at least 90% of the time.	Complete compliance with all safe use of tools and equipment
Work Habits	Evidence that student is unaware of proper work habits	Frequently touched hair, face, reaching into pockets. Little concern for cleanliness. Missed frequent hand washing	Poor hand washing frequency, general cleanliness not evident	Frequently washed hands, minimal incidences of hair/face Touching	Extreme care given to person; no incidences of touching face, hair or unclean surfaces
Cleanup	Evidence student is unaware of proper methods for cleaning and sanitizing tools and workstation	Equipment and tools not cleaned/ sanitized, or put away.	Most tools and area not clean/sanitized, or put away.	One or two tools / equipment not cleaned, sanitized and put away.	Observation showed all compliance with tools, area and equipment

Results (all sections reporting; target: 75% of students scoring a “3” or “4” on rubric):

Results:

Competency area: Uniform and Hygiene							
Performance level							
0	1	2	3	4	total	Term	Course
1	2	6	15	55	79	Fall 2015	CULN 1110
0	0	0	3	36	39	Fall 2015	CULN 1112
0	0	2	6	26	34	Fall 2015	CULN 1132
0	0	2	6	8	16	Fall 2015	CULN 2214
0	0	0	2	15	17	Fall 2015	CULN 2232
1	2	10	32	140	185	Fall 2015	All classes
0	1	4	16	38	59	Spring 2016	CULN 1110
0	2	0	5	28	35	Spring 2016	CULN 1112
0	0	3	4	9	16	Spring 2016	CULN 1132
0	0	1	5	7	13	Spring 2016	CULN 2214
0	0	0	0	23	23	Spring 2016	CULN 2232
0	3	8	30	105	146	Spring 2016	All classes
					92.7%	meeting target (3 or 4)	

Competency area: Workstation							
Performance level							
0	1	2	3	4	total	Term	Course
1	1	7	17	53	79	Fall 2015	CULN 1110
2	0	1	5	31	39	Fall 2015	CULN 1112
0	0	0	11	23	34	Fall 2015	CULN 1132
0	0	3	9	4	16	Fall 2015	CULN 2214
0	0	0	14	3	17	Fall 2015	CULN 2232
3	1	11	56	114	185	Fall 2015	All classes
0	0	8	31	20	59	Spring 2016	CULN 1110
0	2	0	6	30	38	Spring 2016	CULN 1112
0	0	3	5	8	16	Spring 2016	CULN 1132
0	0	4	4	5	13	Spring 2016	CULN 2214
0	0	0	5	18	23	Spring 2016	CULN 2232
0	2	15	51	81	149	Spring 2016	All classes
					90.4%	meeting target (3 or 4)	

Competency area: Tools and Equipment							
Performance level							
0	1	2	3	4	total	Term	Course
0	0	2	13	47	62	Fall 2015	CULN 1110
1	0	3	14	38	56	Fall 2015	CULN 1112
0	0	0	7	27	34	Fall 2015	CULN 1132
0	0	2	8	6	16	Fall 2015	CULN 2214
0	0	3	12	2	17	Fall 2015	CULN 2232
1	0	10	54	120	185	Fall 2015	All classes
0	0	5	25	29	59	Spring 2016	CULN 1110
0	1	1	3	33	38	Spring 2016	CULN 1112
0	0	3	5	8	16	Spring 2016	CULN 1132
0	0	2	6	5	13	Spring 2016	CULN 2214
0	0	0	3	20	23	Spring 2016	CULN 2232
0	1	11	42	95	149	Spring 2016	All classes
					93.1%	meeting target (3 or 4)	

Competency area: Work Habits							
Performance level							
0	1	2	3	4	total	Term	Course
2	0	3	18	39	62	Fall 2015	CULN 1110
1	1	5	2	47	56	Fall 2015	CULN 1112
0	0	0	8	26	34	Fall 2015	CULN 1132
0	0	3	6	6	15	Fall 2015	CULN 2214
0	0	3	11	3	17	Fall 2015	CULN 2232
3	1	14	45	121	184	Fall 2015	All classes
0	0	6	23	29	58	Spring 2016	CULN 1110
2	2	1	6	27	38	Spring 2016	CULN 1112
0	0	3	5	8	16	Spring 2016	CULN 1132
0	0	2	6	5	13	Spring 2016	CULN 2214
0	0	0	3	20	23	Spring 2016	CULN 2232
2	2	12	43	89	148	Spring 2016	All classes
					89.8%	meeting target (3 or 4)	

Competency area: Cleanup							
Performance level							
0	1	2	3	4	total	Term	Course
0	1	3	13	45	62	Fall 2015	CULN 1110
1	0	3	2	50	56	Fall 2015	CULN 1112
0	0	0	6	28	34	Fall 2015	CULN 1132
0	0	2	8	6	16	Fall 2015	CULN 2214
0	0	0	0	17	17	Fall 2015	CULN 2232
1	1	8	29	146	185	Fall 2015	All classes
0	0	3	9	47	59	Spring 2016	CULN 1110
0	0	0	0	38	38	Spring 2016	CULN 1112
0	0	3	4	9	16	Spring 2016	CULN 1132
0	0	1	4	8	13	Spring 2016	CULN 2214
0	0	0	3	20	23	Spring 2016	CULN 2232
0	0	7	20	122	149	Spring 2016	All classes
					94.9%	meeting target (3 or 4)	

ServSafe Food Manager Standardized Exam (total score)

Courses assessed: CULN 1003, CULN 1103

Not Passed (<75%)	Passed (>=75%)	Term	Course
23	65	88	Fall 2015
24	49	73	Spring 2016
47	114	161	all terms
		70.8%	meeting target (passed exam)

Outcome #4: Demonstrate Baking and Pastry skills with more advanced decorating techniques, more complex preparations of pastry, confections and dessert products.

Courses assessed: CULN 2232
(see practical baking rubric, outcome #2)

Competency Area				Performance level					Total	Term	Course
				0	1	2	3	4			
Demonstrate the ability to prepare a variety of hot and cold advanced pastries and baked goods.				0	0	1	6	3	10	Fall 2015	CULN 2232
				0	0	3	15	5	23	Spring 2016	CULN 2232
				0	0	4	21	8	33	Total all terms	
									87.9%	meeting target (3 or 4)	
Demonstrate the ability to read and correct recipes while successfully producing the correct end-product.				0	0	1	6	3	10	Fall 2015	CULN 2232
				0	0	3	15	5	23	Spring 2016	CULN 2232
				0	0	4	21	8	33	Total all terms	
									87.9%	meeting target (3 or 4)	
Demonstrate correct knife, tool, and equipment skills and techniques.				0	0	1	6	3	10	Fall 2015	CULN 2232
				0	0	3	15	5	23	Spring 2016	CULN 2232
				0	0	4	21	8	33	Total all terms	
									87.9%	meeting target (3 or 4)	

Outcome #7 Purchasing and Receiving: Describe and evaluate procedures for proper receiving, storage, and control of food and non-food items; apply knowledge and quality standards and regulations to purchasing decisions.

Tools: Targeted exam/homework questions (objectives 1-3); ServSafe Food Manager Standardized Exam (domain score for Receipt/Storage/Transport of food) (objective 4)

	Objective	Measurement tool	Below CNM Standards	Beginning	Developing	Accomplished	Exemplary
			0	1	2	3	4
1	Describe proper procedures for receiving and inspecting product as it enters the facility.	Targeted assignment question HT 2215 See below	Did not answer question; did not demonstrate grasp of concept.	Assessment missing 1 or more critical components.	Assessment missing more than 2 noncritical components.	Assessment missing 1-2 noncritical components.	Accurate and complete written assessment of receiving procedures.
2	Perform mathematical operations associated with purchasing and receiving.	Targeted assignment question HT 2215 See below	Did not answer question; incorrect procedure and answer.	--	Correct procedure followed; minor error in arithmetic	--	Accurate computation of cost of error.
3	Perform mathematical operations associated with purchasing and receiving.	Targeted exam questions: HT 2215	Accuracy on questions below 71%.	--	Accuracy on questions at 71-81%.	Accuracy on questions at 81-95%.	Accuracy on questions at 95% or higher.
4	Identify standards for safely inspecting	ServSafe Food Safety Exam	Accuracy on questions below	--	--	Accuracy on questions at	Accuracy on questions at 92%

	and grading of meats, poultry, seafood, eggs, dairy products, fruits and vegetables.	Section Domain 3 scores (Receipt/Storage/Transport of food)	75% (9/13 correct responses or below).			75-91% (10/13 or 11/13 correct responses).	or higher (12/13 correct responses or higher).
--	---	---	--	--	--	--	--

Results:

Competency area: Describe proper procedures for receiving and inspecting product as it enters the facility.						
Performance level						
0	1	2	3	4	total	
1	0	3	7	5	16	Total Fall 2015
2	0	3	7	11	23	Total Spring 2016
3	0	6	14	16	39	Total all terms
					76.9%	meeting target (3 or 4)

Competency area: Perform mathematical operations associated with purchasing and receiving (calculate purchasing error).						
Performance level						
0	1	2	3	4	total	
1	0	4	0	11	16	Total Fall 2015
4	0	5	0	15	24	Total Spring 2016
5	0	9	0	26	40	Total all terms
					65.0%	meeting target (3 or 4)

Competency area: Perform mathematical operations associated with purchasing and receiving (targeted exam questions).						
Performance level						
0	1	2	3	4	total	
0	0	1	6	3	10	Total Fall 2015
1	0	4	14	4	23	Total Spring 2016
1	0	5	20	7	33	Total all terms
					81.8%	meeting target (3 or 4)

Competency area: Identify standards for safely inspecting and grading of meats, poultry, seafood, eggs, dairy products, fruits and vegetables. ServSafe Food Manager Standardized Exam (domain 3 (Receipt, Storage, Transport of food) scores) (CULN 1003, 1103)

Below Standard (<75%)	Accomplished (75-91%)	Exemplary (>=92%)	Total	
37	33	18	88	Total Fall 2015
22	29	22	73	Total Spring 2016
59	62	40	161	Total all terms
			63.4%	meeting target (>=75%)

Analysis and Interpretation of Assessment Results/Findings:

Baking Program: The data reveals the process for learning is on target. 80-90% of students enrolled in the baking courses meet or exceed expectations. This data shows that CNM instructors strive to ensure that graduating students are very prepared to enter the Culinary & Baking & Pastry workforce and are very equipped to work in the industry.

Ongoing adjustments to the feedback form(s) will be made to better assess the student’s daily lab performance. Faculty will work on making changes in the Spring of 2017.

Action Plan in Support of Student Learning:

Our five-year cycle plan will expire after this upcoming year. We should meet as a group and discuss a self-assessment of our past procedures. There is a rubric for this that we can use on the SAAC Website, and there are also assessment facilitators who might be able to help us develop ways to get more actionable data and/or make the process simpler.

We need to develop a process for faculty and colleagues to discuss how the program is doing and what actions we should take, on an on-going (perhaps tri-annual meetings) way, so discussion is always happening and data being reviewed during the year; not only during the time this report is due. We could set up a chat room on our Culinary Arts Page, to make this easier for day and evening instructors to communicate with each other on a regular basis.

We need to devise competency-based outcomes and measurement tools for assessing our nutrition outcome, and should consider measuring that outcome beginning in the Fall 2017. This might include practical exercises specifically related to recipe modification.

Efforts to learn about CBE and consider the logistics of implementing a new CBE curriculum for culinary arts could improve graduate quality and could result in an increase in enrollment due to experienced cooks and chefs that normally do not have the time to return to school, coming back because they know they could complete the program as self-paced and finish as quickly as they are able (in much less time than it would currently take to complete the program as it is now).

As stated above adjustments to the feedback form will be made to better assess the student's daily lab grade. Faculty will begin the changes in the Spring 2017. The rubric and forms will be developed for students to better understand the expectations of professionalism and baking requirements for the daily Lab.

Recommendations, Proposals, and/or Funding Requests:

Continue to update facility issues. Bake Lab needs additional electrical work to support equipment. Additional molds and tools should be ordered for 2232 to support the instruction of advanced pastry techniques and molded desserts.

PART 4: EMBEDDED OUTCOMES

Critical Thinking and Life Skills/Teamwork Development within Programs:

- a) Please describe how Critical Thinking assessment is embedded within your program assessment.
- b) Please describe how Life Skills/Teamwork assessment is embedded within your program assessment.

a) While most written assignments in both lab and non-lab classes have a critical thinking component, critical thinking in culinary lab classes (CULN 1110, 1112, 1130, 1132, 2232) is assessed in the student's ability to plan their execution of recipes/formulas within the day's activities. Most instructors ask students to prepare a written "firing sheet" or plan—similar to what successful cooks use in industry—to detail how they are going to approach a lab session. Some instructors require lab students to complete notebooks or reflections asking the student to self-assess their prepared food and submit these materials to instructors. Most instructors calculate these outcomes using rubrics similar to those used for other program outcomes used elsewhere in this report.

b) Students in baking lab classes are assessed daily by means of a daily lab grade/critique sheet that includes the student's attendance, professionalism, teamwork, and level of prior-to-class preparation for the day's activities. Instructors calculate these outcomes using rubrics similar to those used for other program outcomes used elsewhere in this report.

PART 5: ASSESSMENT CYCLE PLAN (Copy and paste from original plan if unchanged)

Cycle Years:	Plan Description:
2011-2017	<p>Our assessment plan for the AAS in Culinary Arts and its embedded certificate is designed to measure a variety of outcomes we have determined are necessary for success upon graduation and that also measure our compliance with our accrediting body's (American Culinary Federation Educational Foundation) "Knowledge and Competencies." Some outcomes will be measured at various points in the program to provide assessment of how our students are progressing. Some outcomes are simply measured at a single point because they are measured by standardized testing or are primarily taught in only one course.</p> <p>Minor changes and corrections to the timeline and courses for assessment relative to last year's plan have been made to reflect changes in course-level outcomes and to the course catalog.</p>

Student Learning Outcomes/Exit Competencies:	When Measured:	Where Measured:	How Measured:
1. Demonstrate the ability to prepare a variety of hot and cold food products according to standard recipes as well as application of basic cooking methods using proper knife, tool, and equipment techniques.	2011-2017 2015-2017	CULN 1110	Practical Finals utilizing standardized rubrics (direct/internal)
2. Demonstrate knowledge of the fundamentals of baking science by preparing a variety of products according to standard recipes using proper hand, tool, and equipment techniques.	2015-2017	CULN 1130, 1132	Critique Sheets/Instructor Feedback Form Practical Finals utilizing standardized rubrics (direct/internal)
3. Demonstrate hygiene and sanitation standards in a kitchen setting. Describe basic principles of sanitation, safety, and procedures to determine and monitor critical control points in a professional food service setting.	2011-2017 2011-2017 2015-2017	CULN 1103 CULN 1110, 1130, 1132	ServSafe Standardized Exam(direct/external) Practical Finals utilizing standardized rubrics (direct/internal); assessment measurement tool to be determined for CULN 2214
4. Demonstrate Baking and Pastry skills with more advanced decorating techniques, more complex preparations of pastry, confections and dessert products. (Degree only)	2015-2017	CULN 2232 (Degree only)	Critique Sheets/Instructor Feedback Form Practical Finals utilizing standardized rubrics (direct/internal)
5. Describe and evaluate organizational structures, leadership styles, and personnel management techniques as they apply to a wide variety of hospitality operations. (Degree only)	2015-2017	HT 2201	ManageFirst Exam (direct/external); HT 2201 Final Project (direct/internal) (tentative)
6. Describe and evaluate procedures for proper receiving, storage, and control of food and non-food items; apply knowledge and quality standards and regulations to purchasing decisions. (Degree only)	2013-2017	CULN 1103 HT 2215	Domain 3 scores (Receipt/Storage/Transport of food) in ServSafe Food Safety Exam(direct/external) targeted assignment and exam questions (direct/internal)
7. Describe the characteristics, functions, and food sources of the major nutrients and how to maximize nutrient retention in food preparation and storage. (Degree only)	2016-2017	NUTR 1010; CULN 1110/1112	Assessment measures to be determined