

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

PART 1: CONTACT & PROGRAM IDENTIFICATION

Report Year and Contact Information			
2016-2017 Academic Year	Nick Jones Contact Person	njones37@cnm.edu Email	Ext. 53326 Phone Number

Subject of this Assessment Report		
Program: Brewing and Beverage Management (Certificate in Brewing Technology and Certificate in Beverage Management embedded) <input checked="" type="checkbox"/> Certificate <input type="checkbox"/> AA <input type="checkbox"/> AS <input checked="" type="checkbox"/> AAS	Gen Ed Area: _____ Applicable to: <input type="checkbox"/> AA/AS <input type="checkbox"/> AAS	Non-Award, Non-Gen-Ed Discipline Area: _____

PART 2: THE YEAR IN RETROSPECT

Program/Area Highlights (Including, wherever applicable, course completion, job placement, and licensing examination information)
<p>The BEV Program has gotten off to an amazingly successful start. Despite the challenges related to a lack of space and commercial-scale brewing equipment, students have been progressing through the program successfully and entering the brewing industry. Out of an initial cohort of 14 students, 7 have earned their Certificate in Brewing Technology. Of that same cohort, 7 have found jobs in local breweries, and feedback from the breweries has been extremely positive.</p> <p>Nick Jones, the BEV program's full-time faculty member, has prepared curricula, MCOs, and Blackboard course shells and assessments for use by part-time BEV faculty for all brewing-related BEV courses.</p> <p>The BEV program has successfully engaged with the local brewing industry, including a DACUM process to identify important skills and learning outcomes and hosting the Technical Conference of the New Mexico Brewers Guild in 2017.</p>

Changes Made in Support of Student Learning
<p>No changes made this year because new program changes will be made next year.</p>

PART 3: REPORT ON RECENT ASSESSMENT OF STUDENT LEARNING

Student Learning Outcome(s) Assessed <i>To add rows: right –click in cell below and select “Insert,” “Insert Rows Above”</i>	Classes/Cohorts Assessed							
Demonstrate competency in brewing science and brewhouse operations	2016-2017	BEV 1100	BEV 1110	BEV 1130	BEV 1140	BEV 1160	BEV 1192	BEV 2160
	Fall		X					
	Spring		X	X	X			
	Summer		X					
Design, formulate, and create beverage products	2016-2017	BEV 1100	BEV 1110	BEV 1130	BEV 1140	BEV 1160	BEV 1192	BEV 2160
	Fall							
	Spring			X	X			
	Summer							
Analyze and control beverages for quality	2016-2017	BEV 1100	BEV 1110	BEV 1130	BEV 1140	BEV 1160	BEV 1192	BEV 2160
	Fall	X	X				X	
	Spring	X	X	X	X		X	
	Summer	X	X				X	
Demonstrate knowledge of best practices in brewing and beverage industry	2016-2017	BEV 1100	BEV 1110	BEV 1130	BEV 1140	BEV 1160	BEV 1192	BEV 2160
	Fall	X	X				X	

	<table border="1"> <tr> <td>Spring</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td></td> <td>X</td> <td></td> </tr> <tr> <td>Summer</td> <td>X</td> <td>X</td> <td></td> <td></td> <td></td> <td>X</td> <td></td> </tr> </table>	Spring	X	X	X	X		X		Summer	X	X				X																	
Spring	X	X	X	X		X																											
Summer	X	X				X																											
Demonstrate competency in draught system design and maintenance	<table border="1"> <tr> <td>2016-2017</td> <td>BEV 1100</td> <td>BEV 1110</td> <td>BEV 1130</td> <td>BEV 1140</td> <td>BEV 1160</td> <td>BEV 1192</td> <td>BEV 2160</td> </tr> <tr> <td>Fall</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td></td> </tr> <tr> <td>Spring</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td></td> </tr> <tr> <td>Summer</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td></td> </tr> </table>	2016-2017	BEV 1100	BEV 1110	BEV 1130	BEV 1140	BEV 1160	BEV 1192	BEV 2160	Fall						X		Spring						X		Summer						X	
2016-2017	BEV 1100	BEV 1110	BEV 1130	BEV 1140	BEV 1160	BEV 1192	BEV 2160																										
Fall						X																											
Spring						X																											
Summer						X																											

Measurement Tool(s) Used <i>To add rows: right-click in cell below and select "Insert," "Insert Rows Above"</i>	Enter X's for type of tool				Initial Achievement Target or Expectation
	Internal	External	Direct	Indirect	
BEV 1100 Final Written Exam (Cicerone CBS Certification)		X	X		75% of students score 70% or higher
BEV 1100 Final Tasting Exam	X		X		75% of students score 70% or higher
BEV 1110 OSHA 10 Certification		X		X	80% of students earn certificate
BEV 1110 Brewers Association Safety Certificates		X	X		80% of students earn all BA safety certificates
BEV 1110 Final Written Exam	X		X		75% of students score 70% or higher

BEV 1130/1160 ServSafe Alcohol Certification		X	X		80% of students earn certificate
BEV 1130 Final Tasting Exam	X		X		75% of students score 70% or higher
BEV 1130 Final Written Exam	X		X		75% of students score 70% or higher
BEV 1140 Final Tasting Exam	X		X		75% of students score 70% or higher
BEV 1140 Final Written Exam	X		X		75% of students score 70% or higher
BEV 1192 Troubleshooting Demonstration	X		X		75% of students score 70% or higher
BEV 1192 Final Exam	X		X		75% of students score 70% or higher

Assessment Findings							
Measurement Tool	Fall 2016						
	<61	61-70	71-80	81-90	>91	Total	Analysis
BEV 1100 Final Written Exam (Cicerone CBS Certification)	7	4	7	6	7	31	Did not meet target
BEV 1100 Final Tasting Exam	9	3	5	6	8	31	Did not meet target
BEV 1110 OSHA 10 Certification	0	0	0	0	0	0	Instructor unavailable

BEV 1110 Brewers Association Safety Certificates	0	0	1	1	13	15	Target met
BEV 1110 Final Written Exam	2	1	1	4	7	15	Did not meet target
BEV 1130/1160 ServSafe Alcohol Certification	5				13	18	Did not meet target
BEV 1130 Final Tasting Exam						0	Did not offer class
BEV 1130 Final Written Exam						0	Did not offer class
BEV 1140 Final Tasting Exam						0	Did not offer class
BEV 1140 Final Written Exam						0	Did not offer class
BEV 1192 Troubleshooting Demonstration	2	0	0	0	6	8	Target met
BEV 1192 Final Exam	0	0	1	3	4	8	Target met
Measurement Tool	Spring 2017						

	<61	61-70	71-80	81-90	>91	Total	Analysis
BEV 1100 Final Written Exam (Cicerone CBS Certification)	0	6	13	19	6	44	Target met
BEV 1100 Final Tasting Exam	8	5	1	9	21	44	Did not meet target
BEV 1110 OSHA 10 Certification	0	0	0	0	15	15	Target met
BEV 1110 Brewers Association Safety Certificates	1	0	0	1	13	15	Target met
BEV 1110 Final Written Exam	1	1	2	6	5	15	Target met
BEV 1130/1160 ServSafe Alcohol Certification	9	0	0	0	32	41	Target met
BEV 1130 Final Tasting Exam	2	0	1	4	8	15	Target met
BEV 1130 Final Written Exam	1	3	5	6	0	15	Did not meet target
BEV 1140 Final Tasting Exam	2	1	4	2	6	15	Target met
BEV 1140 Final Written Exam	3	4	5	1	2	15	Did not meet target

BEV 1192 Troubleshooting Demonstration	2	0	7	2	5	16	Target met
BEV 1192 Final Exam	0	0	2	7	7	16	Target met
	2016-2017						
Measurement Tool	Summer						
	<61	61-70	71-80	81-90	>91	Total	Analysis
BEV 1100 Final Written Exam (Cicerone CBS Certification)	1	0	0	0	11	12	Target met
BEV 1100 Final Tasting Exam	3	0	0	2	7	12	Target met
BEV 1110 OSHA 10 Certification	0	0	0	0	0	0	Did not have instructor
BEV 1110 Brewers Association Safety Certificates	0	0	0	0	8	8	Target met
BEV 1110 Final Written Exam	0	1	0	2	5	8	Target met

BEV 1130/1160 ServSafe Alcohol Certification	1				21	22	Target met
BEV 1130 Final Tasting Exam						0	Class did not run
BEV 1130 Final Written Exam						0	Class did not run
BEV 1140 Final Tasting Exam						0	Class did not run
BEV 1140 Final Written Exam						0	Class did not run
BEV 1192 Troubleshooting Demonstration	0	0	0	0	8	8	Target met
BEV 1192 Final Exam	0	0	3	4	2	9	Target met

Analysis and Interpretation of Assessment Findings

Given that the first BEV classes were offered in the Fall of 2016, everything seems to be on track. Of the 7 assessments that semester, 3 of them met their target of student success. However, since the classes were all new this is not entirely unexpected. The following semester, of those same 7 assessments 6 met their targets for student success, which is a marked improvement. Additionally, the spring semester introduced 5 new assessments, of which 3 met their targets for student success. Again, the hope is that improvements to curriculum and instruction will continue to increase the student success in these new assessments.

All summer classes offered met their targets for student success.

Action Plan in Support of Student Learning

Decision was made to spin off one credit from BEV 1130 and require students to earn OSHA 10 Certification through OSH 2016. This change will be submitted to CCC in Fall 2017. This will alleviate the issue of not having a certified instructor available for the certification exam.

Faculty are making efforts to more directly align existing assessments with the learning outcomes identified by the Higher Education Committee of the Master Brewers Association of the Americas, as well as to develop new assessments to align with these outcomes.

Please indicate with an X all of the following that characterize the types of changes described in the above action plan:

- Pedagogical change
 Course revision
 Process revision
 Curricular revision
 Budgetary reallocation
 Faculty training/development
 Assessment criteria revision
 Assessment methodology revision

Recommendations, Proposals, and/or Funding Requests

While funding requests for additional equipment to provide students with additional learning opportunities are limited by space in which such equipment could be installed, faculty will be submitting Perkins funding requests for the following equipment this year:

- Canning machine and tools
- Malting unit
- Yeast propagation system
- Barrel aging tools and equipment

Additionally, faculty will contribute to the visioning process for a proper brewing lab to be built at CNM. The MBAA has indicated to CNM that the culinary labs which currently house CNM's homebrew-scale brewing equipment do not meet the standards of the MBAA for a proper pilot brewing facility. Faculty is in communication with the MBAA to ensure that the facility the CNM builds will both meet and exceed the MBAA's requirements for a pilot brewing system.

PART 4: ASSESSMENT CYCLE PLAN UPDATE (Copy and paste from original plan if unchanged)

Cycle Years	Description of Changes Made (if applicable)
2016/2017-2021/2022	N/A

Student Learning Outcomes	When Measured	Where Measured	How Measured
1. Demonstrate competency in brewing science and brewhouse operations	2016-2022	BEV 1110 BEV 1130 BEV 1140	Final Written Exam Demonstrations

2. Design, formulate, and create beverage products	2016-2022	BEV 1130 BEV 1140	Term Project
3. Analyze and control beverages for quality	2016-2022	BEV 1100 BEV 1110 BEV 1130 BEV 1140 BEV 1192	Final Tasting Exam
4. Demonstrate knowledge of best practices in brewing and beverage industry	2016-2022	BEV 1100 BEV 1110 BEV 1130 BEV 1140 BEV 1192	Cicerone CBS Cert BA Safety Cert Osha 10 Cert
5. Demonstrate competency in draught system design and maintenance	2016-2022	BEV 1192	Troubleshooting Demonstration Final Written Exam