

**CENTRAL NEW MEXICO COMMUNITY COLLEGE**  
**ASSESSMENT REPORT**  
*Due to SAAC by September 30*

**PART 1: CONTACT & PROGRAM IDENTIFICATION**

Report Year and Contact Information:			
2013-2014 <b>Academic Year</b>	Julie Fuller <b>Contact Person</b>	jfuller@cnm.edu <b>Email</b>	X 50127 <b>Phone Number</b>

Subject of this Assessment Report:		
<b>Program:</b> Chemistry degree <input type="checkbox"/> Certificate <input type="checkbox"/> AA <input checked="" type="checkbox"/> AS <input type="checkbox"/> AAS	<b>Gen Ed Area:</b> _____ Applicable to: <input type="checkbox"/> AA/AS <input type="checkbox"/> AAS	<b>Discipline Area:</b> _____

**PART 2: EVIDENCE OF ACHIEVEMENT OF PROGRAM OUTCOMES**

Summary of Program Success in Achieving Desired Outcomes:
CHEM 1710 – The results currently show a low percentage, but it is the 1 <sup>st</sup> year of data collection.
CHEM 1792 – Achieving success
CHEM 1810 - We want the goal to be 60% achieved
CHEM 2792 –no data reported

Description and Evaluation of Recent Changes Made in Support of Student Learning:
CHEM 1710 – We are re-evaluating our assessment techniques to improve assessment of our outcomes.
CHEM 1792 – no changes
CHEM 1810 - No Change (ACS 2010 version)
CHEM 2792 –

**PART 3: REPORT ON RECENT ASSESSMENT OF STUDENT LEARNING PROCESSES**

<b>Learning Outcome(s)/Exit Competencies Assessed:</b> <i>To add rows: right-click in cell below and select "Insert," "Insert Rows Above"</i>	<b>Classes/Cohorts Assessed:</b>
1. Employ critical thinking skills to judge the validity of information	Chem 1710 (General Chemistry 1)
3. Demonstrate a mastery of basic chemistry laboratory operations and experimental procedures including laboratory observations (both qualitative and quantitative) using sensory experience and appropriate measurement instrumentation (both analog and digital).	Chem 1792 (Gen Chem 1 lab)
4. Use basic computational and graphical techniques to perform laboratory related calculations and data analysis.	CHEM 1810
5. Contribute, as member of a team, to the successful accomplishment of organizational tasks, projects, and goals.	CHEM 2792

<b>Measurement Tool(s) Used:</b> <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>				<b>Initial Achievement Target or Expectation:</b>
	<b>Internal</b>	<b>External</b>	<b>Direct</b>	<b>Indirect</b>	
CHEM 1710 - ACS final exam		x	x		First year assessing these outcomes in this class, no targets or expectations were set.
CHEM 1792 – Lab final exam	x		x		First year assessing these outcomes in this class, no targets or expectations were set.
CHEM 1810 – ACS final exam		x	x		
CHEM 2792 –					

**Assessment Results/Findings:**

CHEM 1710 – Result is 52% successful

CHEM 1792 – Result is 79.8% successful

CHEM 1810 – 51.4% correct responses

CHEM 2792 –

**Analysis and Interpretation of Assessment Results/Findings:**

CHEM 1710 – It is unclear if the success rate is low because the students are low at achieving these outcomes or if the measurement tool (ACS final) didn't assess these items well.

CHEM 1792 – This outcome is a strength

CHEM 1810 – Questions will depend on understanding of chemical concept and computational skill.

CHEM 2792 –

**Action Plan in Support of Student Learning:**

CHEM 1710 -

CHEM 1792 -

CHEM 1810 – 1. More math sources for students taking CHEM 1810

2. For 2015/2016 year, final exam will be given on the last day of classes. There will not be a two hour ACS exam. New version of the final that can be given in 75 minutes must be written.

CHEM 2792 -

<b>Recommendations, Proposals, and/or Funding Requests:</b>
CHEM 1710 –
CHEM 1792 -
CHEM 1810 – The addition of math courses as a pre-requisite for CHEM must be explored
CHEM 2792 -

**PART 4: EMBEDDED OUTCOMES**

<b>Critical Thinking and Life Skills/Teamwork Development within Programs:</b>
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) Critical thinking skills from a scientific standpoint are being addressed with Learning outcome #1. Initial data for this outcome is presented above.
b) Life Skills/Teamwork get assessed more in the corresponding lab classes where students work in groups and have to communicate and participate in performing experiments and collecting / analyzing their data.

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

<b>Plan Description:</b>
The original cycle plan did not have a description, we are not deviating from that plan at present time.

<b>Student Learning Outcomes/Exit Competencies:</b>	<b>When Measured:</b>	<b>Where Measured:</b>	<b>How Measured:</b>
1. Employ critical thinking skills to judge the validity of information from a scientific perspective	2013 – 2015	CHEM 1710 &/or 1792	CHEM 1710 Lecture Final -- direct/external
2. Develop laboratory experimental models that support theoretical chemistry concepts and methodology.	2015 – 2017	CHEM 1710 &/or 1792	CHEM 1792 Lab Final – direct/internal
3. Demonstrate a mastery of basic chemistry laboratory operations and experimental procedures including laboratory observations (both qualitative and quantitative) using sensory experience and appropriate measurement instrumentation (both analog and digital).	2013 – 2015	CHEM 1710 &/or 1792	CHEM 1792 Lab Final – direct/internal

4.	Use basic computational and graphical techniques to perform laboratory related calculations and data analysis.	2013 – 2015	CHEM 1810 &/or 1892	CHEM 1810 ACS Standardized Final Exam – direct/external
5.	Contribute, as member of a team, to the successful accomplishment of organizational tasks, projects, and goals.	2013 – 2015	CHEM 2792 &/or 2892	CHEM 2792/2892 Lab Final – direct/internal
6.	Collect, analyze, and report relevant chemistry/experimental information.	2015-2017	CHEM 1810 &/or 1892	CHEM 1892 Lab Final – direct/internal