

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

PART 1: CONTACT & PROGRAM IDENTIFICATION

Report Year and Contact Information:			
<u>2015-2016</u> Academic Year	<u>Erica Voges</u> Contact Person	<u>evoges</u> Email	<u>X52680</u> Phone Number

Subject of this Assessment Report:		
Program: _____ <input type="checkbox"/> Certificate <input type="checkbox"/> AA <input type="checkbox"/> AS <input type="checkbox"/> AAS	Gen Ed Area: <u>Area III – Lab Sciences</u> Applicable to: <input checked="" type="checkbox"/> AA/AS <input type="checkbox"/> AAS	Discipline Area: <u>Physics, Astronomy</u>

PART 2: EVIDENCE OF OVERALL PROGRAM EFFECTIVENESS

Summary of Program Successes:
<p>Too early to determine as we have completed only one semester of assessments. We allow two years per student learning outcome in case a particular learning outcome was not met. In this case, the learning outcome was met successfully last year so there was no reason to re-assess.</p>

Description and Evaluation of Recent Changes Made in Support of Student Learning:
<p>This is our first year with assessment results, so no changes were made relative to previous years.</p>

PART 3: REPORT ON RECENT ASSESSMENT OF STUDENT LEARNING

Student Learning Outcome(s) Assessed: <small>To add rows: right-click in cell below and select "Insert," "Insert Rows Above"</small>	Classes/Cohorts Assessed:
Utilize mathematical techniques to evaluate and solve scientific problems.	All three sections of PHYS 1510, Fall 2014.

Measurement Tool(s) Used: Test question on final exam. <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: We allow two years per student learning outcome in case a particular learning outcome was not met. In this case, the learning outcome was met successfully last year so there was no reason to re-assess.
	Internal	External	Direct	Indirect	
	x		x		

Assessment Findings:
No new data were taken this year.

Analysis and Interpretation of Assessment Findings:
Last year's data implied our general education students were competent in utilizing mathematical techniques to evaluate and solve scientific problems. Just over 68% of the students earned full points on the algebra portion and 84% did so on the trigonometry portion. Sixty-two percent earned full points on both.

Action Plan in Support of Student Learning:
The current curriculum appears to be doing a good job of helping students achieve this particular learning objective. No drastic changes to curriculum or pedagogy are indicated.

Recommendations, Proposals, and/or Funding Requests:

PART 4: EMBEDDED OUTCOMES

Critical Thinking and Life Skills/Teamwork Development within Programs:
<ul style="list-style-type: none"> 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) The first SLO directly relates to critical thinking: Employ critical thinking skills to judge the validity of information from a scientific perspective. Critical thinking is also employed when applying the scientific method, analyzing data, and solving scientific problems (SLOs 2 and 4).
b) Three of the SLOs will be assessed in physics laboratory courses, which require teamwork.

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

Cycle Years:	Plan Description:
2015-2020	The goal is to assess each of the six Lab Science Gen Ed outcomes over the course of the next five years. These outcomes will be assessed in conceptual and algebra-based physics lectures and labs, as well as an introductory astronomy lecture and lab.

Student Learning Outcomes:	When Measured:	Where Measured:	How Measured:
1. Employ critical thinking skills to judge the validity of information from scientific perspective.	Fall 20 – Spring 22	PHYS 1010	To be determined
2. Apply the scientific method to formulate questions, analyze information/data, and draw conclusions.	Fall 18 – Spring 20	PHYS 1092, ASTR 1192	To be determined
3. Properly operate laboratory equipment to collect relevant and quality data.	Fall 18 – Spring 20	PHYS 1692	To be determined
4. Utilize mathematical techniques to evaluate and solve scientific problems.	Fall 14 - Spring 16 Fall 16 – Spring 18	PHYS 1510 ASTR 1110	Final Exam question
5. Communicate effectively about scientific ideas and topic, in both oral and written formats	Fall 20 – Spring 22	PHYS 1692	To be determined
6. Relate science to personal, social, or global impact.	Fall 16 – Spring 18	PHYS 1010	To be determined