

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

PART 1: CONTACT & PROGRAM IDENTIFICATION

Report Year and Contact Information:			
Fall 2013–Spring 2014 Academic Year	Robert H Hennigan Contact Person	rhennigan@cnm.edu Email	224-3920 Phone Number

Subject of this Assessment Report:		
Program: Computer Information Systems, Network Administration Concentration <input 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	Discipline Area: _____

PART 2: EVIDENCE OF ACHIEVEMENT OF PROGRAM OUTCOMES

Summary of Program Success in Achieving Desired Outcomes:
For the fiscal year 2013-14, of the 1766 students with this declared major, 114 earned their degree. The average class size was 19 students and the retention rate was 85.17%. Of those 114 graduates, 72.3% went to work in the CIS field. 42 out of 114 graduates were from Network Administration concentration.

Description and Evaluation of Recent Changes Made in Support of Student Learning:
Recent changes allowing for hybrid or distance learning style classes have increased student enrollment. It is too early to evaluate how these changes will impact proficiency and graduation levels.

PART 3: REPORT ON RECENT ASSESSMENT OF STUDENT LEARNING PROCESSES

Learning Outcome(s)/Exit Competencies Assessed:	Classes/Cohorts Assessed:
<i>To add rows: right-click in cell below and select "Insert," "Insert Rows Above"</i> Use network protocol models to explain the layers of communications in data	Students were measured in CIS2425 and the Capstone class.

networks.	
Employ basic cabling and network designs to connect devices in accordance with stated objectives.	Same as above
Develop a logical diagram and translate it to a physical implementation.	Same as above
Demonstrate network mathematical literacy both in theory and application as it applies to networks.	Same as above
Design, address, construct and test LANs containing multiple VLANs as well as wireless devices.	Same as above
Design, address, construct and test WAN topologies selecting from current networking technologies	Same as above
Demonstrate the practical application of skills needed to design, implement, and support network security.	Same as above
Demonstrate problem solving ability with data networks.	Same as above

Measurement Tool(s) Used:	Enter X's for type of tool				Initial Achievement Target or Expectation:
	Internal	External	Direct	Indirect	
<i>To add rows: right-click in cell below and select "Insert," "Insert Rows Above"</i>					
Two measurement tools were used: 1) A comprehensive skills based assessment requiring the students to build a functional network.	X		X		Outcomes 1-8: The Network Administration exit competencies are evaluated using a Rubrics with a scale of 4=excellent, 3=good, 2=fair and 1=poor. We believe a score of 3+ for 75% of our students represents success in accomplishing our goals.
2) A comprehensive electronic pre-certification exam.				X	

Assessment Results/Findings:
Outcomes 1-8: A total of 33 Network Administration students completed the Network Administration assessment activities in the Capstone course in Fall, 2013 and Spring 2014. The results are as follows:

	COMP 1	COMP 2	COMP 3	COMP 4	COMP 5	COMP 6	COMP 7	COMP 8
SCORE	Protocols	Design	Document	Net Math	LAN VLANs	WANs	Security	Trouble Shooting
4	8	8	7	6	10	8	8	7
3.5	5	3	7	8	3	4	6	4
3	15	18	17	18	17	15	17	21
2.5	4	3	1	0	2	5	1	0
2.0	1	1	1	1	1	1	1	1
1.0	0	0	0	0	0	0	0	0

Using the Achievement Target of 3+ criteria for 75% of our students, the raw data is:

	COMP 1	COMP 2	COMP 3	COMP 4	COMP 5	COMP 6	COMP 7	COMP 8
SCORE	Protocols	Design	Document	Net Math	LAN VLANs	WANs	Security	Trouble Shooting
3+	28	29	31	32	30	27	31	32
<3	5	4	2	1	3	6	2	1
Meet Target3	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

A total of 118 students took the Linux Skills Exam, this encompasses 8 sections, 3 sections of Fall 2013 and 5 sections of Spring 2014.

SUCCESS SCORE	RAW TOTAL (OUT OF 118)	%
EXCELLENT 90-100 4	64	54
Good 80-89 3	28	24
FAIR 70-79 2	11	9
POOR 69 OR LESS	15	13
TOTAL SCORES 3+	92	78

Meet target of 80%, score 3 or 4 for 75% of our students? Yes

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Analysis and Interpretation of Assessment Results/Findings:
The program is achieving the desired results.

Action Plan in Support of Student Learning:
Continue doing what we are doing because it seems to be working well.

Recommendations, Proposals, and/or Funding Requests:

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) Our program teaches critical thinking through the instructor led, lecture/lab, question and answer format of all classes. Solutions are reached after Deliberation as a group. Classes allow the give and take necessary to realize there is more than one way to do something.
b) Our classes require students to work in small groups, collaborate, discuss, and negotiate until successful completion of the labs is achieved.

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

Plan Description:
The Network Administration exit competencies are evaluated using a Rubrics with a scale of 4=excellent, 3=good, 2=fair and 1=poor. We believe a score of 3+ for 75% of our students represents success in accomplishing our goals.

Student Learning Outcomes/Exit Competencies:	When Measured:	Where Measured:	How Measured:
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<p>1. Use network protocol models to explain the layers of communications in data networks.</p>	<p>Outcomes 1-8 CIS Network Administration students were assessed in their final semester via the CIS 2999 Capstone course.</p>	<p>Outcomes 1-8 CIS Network Administration students were assessed in their final semester via the CIS 2999 Capstone course.</p>	<p>Students were assessed via two different methods in their Capstone Project:</p> <ol style="list-style-type: none"> 1) The student was assigned a skills test in which they had to simulate a company with complex network requirements. The student had to design the network, select the appropriate devices, connect and configure them, and demonstrate to the instructor that it functioned correctly. DIRECT methods were used to assess student performance. (1-8) 2) The second part of the Capstone project required the student to complete a comprehensive written exam that fairly measures their comprehension and preparedness to complete an industry recognized certification exam. EXTERNAL methods were used to assess student performance.
<p>2. Employ basic cabling and network designs to connect devices in accordance with stated objectives.</p>	<p>Same as 1</p>	<p>Same as 1</p>	<p>Same as 1</p>
<p>3. Develop a logical diagram and translate it to a physical implementation.</p>	<p>Same as 1</p>		
<p>4. Demonstrate network mathematical literacy both in theory and application as it applies to networks.</p>	<p>Same as 1</p>		
<p>5. Design, address, construct and test LANs containing multiple VLANs as well as wireless devices.</p>	<p>Same as 1</p>		
<p>6. Design, address, construct and test WAN topologies selecting from current networking technologies</p>	<p>Same as 1</p>		

7. Demonstrate the practical application of skills needed to design, implement, and support network security.	Same as 1		
8. Demonstrate problem solving ability with data networks.	Same as 1		
9.			
10.			