

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

**PART 1: CONTACT & PROGRAM IDENTIFICATION**

Report Year and Contact Information:			
<u>2014-2015</u> <b>Academic Year</b>	<u>Terry Gonzales</u> <b>Contact Person</b>	<u>tfgonz@cnm.edu</u> <b>Email</b>	<u>224-4000 ext. 50214</u> <b>Phone Number</b>

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

**PART 2: EVIDENCE OF OVERALL PROGRAM EFFECTIVENESS**

Summary of Program Successes:
<p>Embedded Assessment: For the 2014-2015 Academic year, there was improvement from 83% to 87% of students achieving our target goals. There was also 86% retention of students enrolled in the courses monitored.</p> <p>Capstone Project Assessment: One graduating capstone student completed the project demonstrating proficiency in client and server side programming.</p>

Description and Evaluation of Recent Changes Made in Support of Student Learning:
<p>It appears that student performance and retention improves when students take classes in a traditional FTF format. Students seem to benefit from the classroom dynamics and interactions with other students and instructors.</p>

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

Student Learning Outcome(s) Assessed:	Classes/Cohorts Assessed:
<i>To add rows: right-click in cell below and select "Insert," "Insert Rows Above"</i> SLO #5 Demonstrate proficiency in developing Web applications using both client-side and server-side programming languages	CIS 1210, CIS 1715, CIS 1730, CIS 1750, CIS 2999

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>					
Performance based projects used in classes CIS 1210, CIS 1715, CIS 1730 and CIS 1750, CIS 2999 as well as Independent Studies projects and/or portfolios	X	X			<p>The goal is to have 75% of our students achieving a "2" or better.</p> <p>The Web Technology exit competencies (from capstone project) are evaluated using a Rubrics with a scale:</p> <p>3 = Excellent (Work reflects comprehensive treatment of skills – Meets all expectations)</p> <p>2 = Satisfactory (Work reflects some application of skills – Meets most expectations)</p> <p>1 = Unsatisfactory (Work does not reflect adequate application of skills – Does not meet expectations)</p> <p>0 = Component not found</p>

**Assessment Findings:**

For the 2014-2015 Academic year, 87% of students taking CIS 1210, CIS 1715, CIS 1730 and CIS 1750 exceeded our goal of 75% of students meeting or surpassing course expectations. There was also 86% retention of students enrolled in the courses listed.

**Analysis and Interpretation of Assessment Findings:**

Gains in student achievement and retention were made in the 2014-2015 academic year from the previous year.

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

Continuing offering CIS 1750 PHP Programming in a traditional format (face to face) rather than Distance or Blended formats.

**Recommendations, Proposals, and/or Funding Requests:**

**PART 4: EMBEDDED OUTCOMES**

<p><b>Critical Thinking and Life Skills/Teamwork Development within Programs:</b></p> <p>a) Please describe how Critical Thinking assessment is embedded within your program assessment.</p> <p>b) Please describe how Life Skills/Teamwork assessment is embedded within your program assessment.</p>
<p>a) By its nature, Web Development and programming involves critical thinking. Class assignments and projects require students to analyze problems and come up with logical steps to solve a programming problem. Critical thinking is also necessary with designing, debugging and testing Web pages that employ both client-side and server-side programming.</p>
<p>b) Student projects and assignments are evaluated based on timeliness, quality and accuracy of work. Students are required to validate their Web pages for syntactical correctness. Work that is not submitted on time is deducted points.</p>

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

<b>Cycle Years:</b>	<b>Plan Description:</b>
2014-2015	SLO #5 Demonstrate proficiency in developing Web applications using both client side and server side programming.

<b>Student Learning Outcomes:</b>	<b>When Measured:</b>	<b>Where Measured:</b>	<b>How Measured:</b>
1. SLO #1 Demonstrate effective techniques in publishing Web sites	2010 - 2011	CIS 1713, CIS 1715, CIS 1730, CIS 1750, CIS 2740, CIS 2999	<ul style="list-style-type: none"> <li>• Students will be given class projects to demonstrate proficiency in creating and navigating files and folders/subfolders on local and remote computers.</li> <li>• Students will be required to demonstrate proficiency in creating and navigating files and folders/subfolders on local and remote computers in capstone projects.</li> <li>• Students will be given class projects to demonstrate proficiency in using relative paths in the Web documents.</li> <li>• Students will be required to demonstrate proficiency in using</li> </ul>

			relative paths in the Web documents in capstone projects.
2. SLO #2 Create standards compliant Web Pages	2011 - 2012	CIS 1713, CIS 1715, CIS 2740, / CIS 2999	<ul style="list-style-type: none"> <li>• Students will be given class projects to demonstrate proficiency in creating well formed, valid and standards compliant web pages.</li> <li>• Students will be required to demonstrate proficiency in creating well formed, valid and standards compliant web pages in capstone projects.</li> <li>• Students will be given class projects to demonstrate proficiency in creating web pages with properly validated inline, embedded and external style sheets.</li> <li>• Students will be required to demonstrate proficiency in creating web pages with properly validated inline, embedded and external style sheets in capstone projects.</li> <li>•</li> </ul>
3. SLO #3 Demonstrate the ability to create a database for Web applications using SQL	2012 – 2013	CIS 1715, CIS 1750, CIS 1713, CIS 2999	<ul style="list-style-type: none"> <li>• Students will be given class projects to demonstrate proficiency in writing syntactically correct SQL create statement for a multiple table Databases.</li> <li>• Students will be required to demonstrate proficiency writing syntactically correct SQL create statement for a multiple table Databases in capstone projects.</li> <li>• Students will be given class projects to demonstrate proficiency connecting to DBMS, and</li> </ul>

			<p>successfully select the database for use.</p> <ul style="list-style-type: none"> <li>• Students will be required to demonstrate proficiency connecting to DBMS, and successfully select the database for use in capstone projects.</li> <li>• Students will be given class projects to demonstrate proficiency connecting t to DBMS, create accounts and grant appropriate permissions.</li> <li>• Students will be required to demonstrate proficiency connecting to DBMS, create accounts and grant appropriate permissions in capstone projects.</li> </ul>
<p>4. SLO #4 Student can write syntactically correct SQL SELECT/INSERT/UPDATE/DELETE statements for a multiple table Web application.</p>	<p>2013 - 2014</p>	<p>CIS 1715/CIS 1750/ CIS 2999</p>	<ul style="list-style-type: none"> <li>• Students will be given class projects to demonstrate proficiency in selecting data from databases tables.</li> <li>• Students will be required to demonstrate proficiency in selecting data from database tables in capstone projects.</li> <li>• Students will be given class projects to demonstrate proficiency in inserting data into databases tables.</li> <li>• Students will be required to demonstrate proficiency in inserting data into database tables in capstone projects.</li> <li>• Students will be given class projects to demonstrate proficiency in updating and deleting data in databases tables.</li> </ul>

			<ul style="list-style-type: none"> <li>Students will be required to demonstrate proficiency in updating and deleting data in database tables in capstone projects.</li> </ul>
5. SLO #5 - Demonstrate proficiency in developing Web applications using both client side and server side programming.	2014 - 2015	CIS 1715, CIS 1730, CIS 1750, CIS 2999	<ul style="list-style-type: none"> <li>Students will be given class projects to demonstrate proficiency in writing complex syntactically correct client-side programs utilizing functions, cookies and the DOM model.</li> <li>Students will be required to demonstrate proficiency in writing complex syntactically correct client-side programs utilizing functions, cookies and the DOM model in capstone projects.</li> <li>Students will be given class projects to demonstrate proficiency in writing complex syntactically correct server-side programs utilizing functions, cookies and state/session management techniques.</li> <li>Students will be required to demonstrate proficiency in writing complex syntactically correct server-side programs utilizing functions, cookies and state/session management techniques in capstone projects.</li> <li>Students will be given class projects to demonstrate proficiency in implementing secure web pages guarding against security injections using client-side/server-side validation.</li> </ul>

			<ul style="list-style-type: none"> <li>Students will be required to demonstrate proficiency in implementing secure web pages guarding against security injections using client-side/server-side validation techniques in capstone projects.</li> </ul>
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