

**NEW MEXICO JUNIOR COLLEGE**

**Core Competencies Report**

Date Submitted August 1, 2010

Attachments (please check all that apply):

Area I Communications      Assessment completed by Dean Mickey Best

Area II Math – Algebra      Assessment completed by Dean Kelly Holladay

Area II Math – Calculus      Assessment completed by Dean Kelly Holladay

Area II Math – Other Math      Assessment completed by Dean Kelly Holladay

Area III Laboratory Science      Assessment completed by Dean Kelly Holladay

Area IV Social Behavioral      Assessment completed by Dean Kelly Holladay

Area V Humanities/Fine Arts      Assessment completed by Dean Mickey Best

This report fulfills reporting requirements for the New Mexico Higher Education Dept.

*Attested:*

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Chief Academic Officer Signature      John B. Gratton  
Chief Academic Officer Printed Name

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Comments:

## Core Competencies Assessment 2009-2010: Area I Courses

**New Mexico Junior College**

(Place University/College Course Number and Name here)

**Communications Competencies**

(Place New Mexico Common Core Number here)

<u>State Competencies</u> (Learning Outcomes Being Measured)	<u>Assessment Procedures</u> (Process/Instrument named or described – rubric attached)	<u>Assessment Results</u>	<u>How Results Will Be Used To Make Improvements</u>	<u>(Optional)</u> Recommendations/Goals/ Priorities
<p><b>1. Students will analyze and evaluate oral and written communication in terms of situation, audience, purpose, aesthetics, and diverse points of view.</b> Students should: Understand, appreciate, and critically evaluate a variety of written and spoken messages in order to make informed decisions.</p>				
<p><b>2. Students will express a primary purpose in a compelling statement and order supporting points logically and convincingly.</b> Students should: Organize their thinking to express their viewpoints clearly, concisely, and effectively.</p>				
<p><b>3. Students will use effective rhetorical strategies to persuade, inform, and engage.</b> Students should: Select and use the best means to deliver a particular message to a particular audience. Rhetorical strategies include but are not limited to modes (such as narration, description, and persuasion), genres (essays, web pages, reports, proposals), media and technology (PowerPoint™, electronic writing), and graphics (charts, diagrams, formats).</p>				
(Continued)				

**Core Competencies Assessment 2009-2010: Area I Courses, cont.**

**New Mexico Junior College**

(Place University/College Course Number and Name here)

**Communications Competencies, cont.**

(Place New Mexico Common Core Number here)

<u>State Competencies</u> (Learning Outcomes Being Measured)	<u>Assessment Procedures</u> (Process/Instrument named or described – rubric attached)	<u>Assessment Results</u>	<u>How Results Will Be Used To Make Improvements</u>	<u>(Optional)</u> Recommendations/Goals/ Priorities
<p><b>4. Students will employ writing and/or speaking processes such as planning, collaborating, organizing, composing, revising, and editing to create presentations using correct diction, syntax, grammar, and mechanics.</b> Students should: Use standard processes for generating documents or oral presentations independently and in groups.</p>				
<p><b>5. Students will integrate research correctly and ethically from credible sources to support the primary purpose of a communication.</b> Students should: Gather legitimate information to support ideas without plagiarizing, misinforming or distorting.</p>				
<p><b>6. Students will engage in reasoned civic discourse while recognizing the distinctions among opinions, facts, and inferences.</b> Students should: Negotiate civilly with others to accomplish goals and to function as responsible citizens.</p> <p align="center">End -- Area I</p>				

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## Core Competencies Assessment 2009-2010: Area II Courses

**New Mexico Junior College**

(Place University/College Course Number and Name here)

**Mathematics – Algebra Competencies**

(Place New Mexico Common Core Number here)

<u><b>State Competencies</b></u> (Learning Outcomes Being Measured)	<u><b>Assessment Procedures</b></u> (Process/Instrument named or described – rubric attached)	<u><b>Assessment Results</b></u>	<u><b>How Results Will Be Used To Make Improvements</b></u>	<u><b>(Optional)</b></u> Recommendations/Goals/Priorities
<p><b>1. Students will graph functions</b>                      Students should:</p> <ul style="list-style-type: none"> <li>a. Sketch the graphs of linear, higher-order polynomial, rational, absolute value, exponential, logarithmic, and radical functions.</li> <li>b. Sketch a graph using point plotting and analysis techniques, including basic transformations of functions such as horizontal and vertical shifts, reflections, stretches, and compressions.</li> <li>c. Determine the vertex, axis of symmetry, maximum or minimum, and intercepts of a quadratic equation.</li> </ul>				
<p><b>2. Students will solve various kinds of equations.</b>                      Students should:</p> <ul style="list-style-type: none"> <li>a. Solve quadratic equations using factoring, completing the squares, the square root method, and quadratic formula.</li> <li>b. Solve exponential and logarithmic equations.</li> <li>c. Solve systems of two or three linear equations.</li> </ul> <p style="text-align: center;">(Continued)</p>				

**Core Competencies Assessment 2009-2010: Area II Courses, cont.**

**New Mexico Junior College**

(Place University/College Course Number and Name here)

**Mathematics – Algebra Competencies, cont.**

(Place New Mexico Common Core Number here)

<u>State Competencies</u> (Learning Outcomes Being Measured)	<u>Assessment Procedures</u> (Process/Instrument named or described – rubric attached)	<u>Assessment Results</u>	<u>How Results Will Be Used To Make Improvements</u>	<u>(Optional)</u> Recommendations/Goals/Priorities
<p><b>3. Students will demonstrate the use of function notation and perform operations on functions.</b> Students should:</p> <ul style="list-style-type: none"> <li>a. Find the value of a function for a given domain value</li> <li>b. Add, subtract, multiply, divide and compose functions.</li> <li>c. Determine the inverse of a function.</li> <li>d. Compute the difference quotient for a function.</li> <li>e. Correctly use function notation and vocabulary related to functions, i.e. domain, range, independent variable, of, even symmetry, etc.</li> </ul>				
<p><b>4. Students will model/solve real-world problems.</b> Students should:</p> <ul style="list-style-type: none"> <li>a. Use and understand slope as a rate of change.</li> <li>b. Use equations and systems of equations to solve application problems.</li> <li>c. Apply knowledge of functions to solve specific application problems.</li> <li>d. Solve compound interest problems.</li> <li>e. Solve application problems involving maximization or minimization of a quadratic function.</li> <li>f. Solve exponential growth and decay problems.</li> </ul> <p align="center">End – Area II - Algebra</p>				

**Core Competencies Assessment 2009-2010: Area II Courses, cont.**

**New Mexico Junior College**  
 MA 234 Calculus and Analytic Geometry III

**Mathematics - Calculus I Competencies**  
 MATH 2614

<u><b>State Competencies</b></u> (Learning Outcomes Being Measured)	<u><b>Assessment Procedures</b></u> (Process/Instrument named or described – rubric attached)	<u><b>Assessment Results</b></u>	<u><b>How Results Will Be Used To Make Improvements</b></u>	<u><b>(Optional)</b></u> Recommendations/Goals/Priorities
<p><b>1. Students will demonstrate an understanding of the theoretical, geometrical underpinnings of the calculus.</b>                      Students should:                      Algebraically and graphically demonstrate an understanding of:                      a. Limit                      b. Tangent line                      c. Difference quotient                      d. Fundamental theorem of calculus                      e. Riemann sums</p>	<p><b>MATH 2614:</b> Students were tested over their knowledge of three-dimensional, multiple variable work that complements single variables.</p>	<p><b>MATH 2614:</b> All students scored between 79% and 99% on the test and thus the benchmark of 75% was met by all students.</p>	<p><b>MATH 2614:</b> MyMathLab will be required of face to face and online students in order to further advance the students' expertise.</p>	
<p><b>2. Students will use concepts of function, limit, continuity, derivative, and integral.</b>                      Students should:                      Apply the theory of calculus through manipulations involving:                      a. The finding of limits.                      b. Using differentiation techniques.                      c. Working with transcendental &amp; trigonometric functions.                      d. Determining points of discontinuity and intervals of continuity.</p>	<p><b>MATH 2614:</b> Students were tested over their knowledge of multiple variable functions, limits, continuity, partial derivatives, chain rule derivatives, and double and triple integrals.</p>	<p><b>MATH 2614:</b> 83% of the students met the benchmark of 75% while 17% of the students scored below this benchmark.</p>	<p><b>MATH 2614:</b> The outside assignments and homework for the class will be analyzed to ensure said assignments are pertinent to student needs.</p>	

(Continued)

**Core Competencies Assessment 2009-2010: Area II Courses, cont.**

**New Mexico Junior College**  
 MA 234 Calculus and Analytic Geometry III

**Mathematics - Calculus I Competencies, cont.**  
 MATH 2614

<u>State Competencies</u> (Learning Outcomes Being Measured)	<u>Assessment Procedures</u> (Process/Instrument named or described – rubric attached)	<u>Assessment Results</u>	<u>How Results Will Be Used To Make Improvements</u>	<u>(Optional)</u> Recommendations/Goals/ Priorities
<p><b>3. Students will apply methods of calculus to optimization, graphing, and approximation.</b>                      Students should be able to:</p> <ul style="list-style-type: none"> <li>a. Find extreme points.</li> <li>b. Understand the graphs of a function and its 1<sup>st</sup> and 2<sup>nd</sup> derivatives and how they relate.</li> <li>c. Apply Newton’s method.</li> <li>d. Use differentials to approximate functions.</li> </ul>	<p><b>MATH 2614:</b> Using a five point rubric, students’ knowledge of extreme values and saddle points was assessed.</p>	<p><b>MATH 2614:</b> 94% of the students’ responses demonstrated a score of three or better on the rubric.</p>	<p><b>MATH 2614:</b> The results will be compared to previous classes and an analysis will be conducted of online student success.</p>	
<p><b>4. Students will apply differential and integral calculus to problems in geometry, physics, and other fields.</b>                      Students should:</p> <ul style="list-style-type: none"> <li>a. Understand that calculus has many uses in science, business, and other fields.</li> <li>b. Students should be able to solve application problems involving rates of change, optimization, related rates, and acceleration/velocity.</li> </ul> <p align="center">End Area II – Calculus I</p>	<p><b>MATH 2614:</b> Using a five point rubric, students’ ability to apply differential and integral calculus to problems in geometry, physics, and other fields was assessed.</p>	<p><b>MATH 2614:</b> 86% of the students’ responses demonstrated a score of three or better on the rubric.</p>	<p><b>MATH 2614:</b> The results will be compared to previous classes to determine the most appropriate manner of presenting the material.</p>	

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**Core Competencies Assessment 2009-2010: Area II Courses, cont.**

New Mexico Junior College

Mathematics – Other College-Level Mathematics Competencies

MA 123 Plane Trigonometry

MATH 1213

<u>State Competencies</u> (Learning Outcomes Being Measured)	<u>Assessment Procedures</u> (Process/Instrument named or described – rubric attached)	<u>Assessment Results</u>	<u>How Results Will Be Used To Make Improvements</u>	<u>(Optional)</u> Recommendations/Goals/ Priorities
<p><b>1. Students will display, analyze, and interpret data.</b> Students should:</p> <ul style="list-style-type: none"> <li>a. Discriminate among different types of data displays for the most effective presentation.</li> <li>b. Draw conclusions from the data presented.</li> <li>c. Analyze the implication of the conclusion to real life situations.</li> </ul>	<p><b>MATH 1213:</b> Using assignment rubrics and chapter tests, students were assessed on their knowledge of radians versus degrees, unit circle, linear, and angular speed.</p>	<p><b>MATH 1213:</b> 91.5% of the students met the benchmark of 80% on the assessments.</p>	<p><b>MATH 1213:</b> More emphasis will be placed upon drawing conclusions from the data.</p>	
<p><b>2. Students will demonstrate knowledge of problem-solving strategies.</b> Students should:</p> <ul style="list-style-type: none"> <li>a. For a given problem, gather and organize relevant information.</li> <li>b. Choose an effective strategy to solve the problem</li> <li>c. Express and reflect on the reasonableness of the solution to the problem.</li> </ul> <p align="center">(Continued)</p>	<p><b>MATH 1213:</b> Students were assessed by means of written tests.</p>	<p><b>MATH 1213:</b> Only 43% of the students met the benchmark of 80% on the tests with a class average of 67.5%</p>	<p><b>MATH 1213:</b> More practice will be dedicated to verifying identities and solving problems. In future classes, the outcome will be assessed in two separate tests rather than one.</p>	



**Core Competencies Assessment 2009-2010: Area II Courses, cont.**

New Mexico Junior College  
MA 123 Plane Trigonometry

Mathematics – Other College-Level Mathematics Competencies, cont.  
MATH 1213

<u>State Competencies</u> (Learning Outcomes Being Measured)	<u>Assessment Procedures</u> (Process/Instrument named or described – rubric attached)	<u>Assessment Results</u>	<u>How Results Will Be Used To Make Improvements</u>	<u>(Optional)</u> Recommendations/Goals/ Priorities
<p><b>3. Students will construct valid mathematical explanations.</b> Students should: Use mathematics to model and explain real life problems.</p>	<p><b>MATH 1213:</b> Using assignment rubrics and chapter tests, students were assessed on their knowledge of solving right triangle problems.</p>	<p><b>MATH 1213:</b> 84% of the students met the benchmark of 80% on the homework while 82.5% of the students met the benchmark of 80% on the test.</p>	<p><b>MATH 1213:</b> More emphasis will be placed on using mathematics to explain real life problems.</p>	
<p><b>4. Students will display an understanding of the development of mathematics.</b> Students should: Recognize that math has evolved over centuries and that our current body of knowledge has been built upon contributions of many people and cultures over time.</p>	<p><b>MATH 1213:</b> Using homework assignments and chapter tests, students were assessed on their ability to solve relationships among right and oblique triangles.</p>	<p><b>MATH 1213:</b> 94% of the students met the benchmark of 80% on the homework while only 44% of the students met the benchmark of 80% on the chapter tests.</p>	<p><b>MATH 1213:</b> Questions from the material will be added to the final examination in an attempt to motivate higher student performance.</p>	
<p><b>5. Students will demonstrate an appreciation for the extent, application, and beauty of mathematics.</b> Students should: Recognize the inherent value of mathematical concepts, their connection to structures in nature, and their implications for everyday life.</p> <p align="center">End – Area II Other Math</p>	<p><b>MATH 1213:</b> Students were required to submit a response paper addressing their appreciation for the extent, application, and beauty of mathematics.</p>	<p><b>MATH 1213:</b> 100% of the students submitted the required paper and all students responded positively.</p>	<p><b>MATH 1213:</b> Continue to emphasize an appreciation of mathematical applications.</p>	

## Core Competencies Assessment 2009-2010: Area III Courses

### New Mexico Junior College

GE 114 Physical Geology; GE 124 Historical Geology; PH 114 General Physics I  
PH 124 General Physics II; PH 214 Engineering Physics I; PH 224 Engineering Physics II

### Laboratory Science Competencies

GEOL 1114; GEOL 1214; PHYS 1114  
PHYS 1124; PHYS 1214; PHYS 1224

<u>State Competencies</u> (Learning Outcomes Being Measured)	<u>Assessment Procedures</u> (Process/Instrument named or described – rubric attached)	<u>Assessment Results</u>	<u>How Results Will Be Used To Make Improvements</u>	<u>(Optional)</u> Recommendations/Goals/ Priorities
<p><b>1. Students will describe the process of scientific inquiry.</b> Students should:</p> <ol style="list-style-type: none"> <li>a. Understand that scientists rely on evidence obtained from observations rather than authority, tradition, doctrine, or intuition.</li> <li>b. Students should value science as a way to develop reliable knowledge about the world.</li> </ol>	<p><b>GEOL 1114:</b> Students were required to observe 15 samples in lab, test the samples for physical properties, and use the test results to identify the samples; <b>GEOL 1214:</b> Students were required to observe 15 samples in lab, test the samples for physical properties, and use the test results to identify the samples; <b>PHYS 1114:</b> Students were administered a ten question quiz covering scientific inquiry and learning pedagogy; <b>PHYS 1124:</b> Students were required to identify the stages of the scientific method for an electrostatics laboratory experiment; <b>PHYS 1214:</b> Students were administered a ten question quiz covering scientific inquiry;</p> <p><b>PHYS 1224:</b> Students were required to identify the stages of the scientific method in an electrostatics experiment;</p>	<p><b>GEOL 1114:</b> The average student performance on the assignment was 76.84%;</p> <p><b>GEOL 1214:</b> The average student performance on the assignment was 65.9%</p> <p><b>PHYS 1114:</b> 100% of the students met the benchmark of 70% with a class average of 93%;</p> <p><b>PHYS 1124:</b> 100% of the students met the benchmark of 70% with a class mean of 96%;</p> <p><b>PHYS 1214:</b> 100% of the students met the benchmark of 70% with a class average of 87%;</p> <p><b>PHYS 1224:</b> 83% of the students met the benchmark of 70% with a mean of 79% on the assignment;</p>	<p><b>GEOL 1114:</b> More class time will be dedicated to review;</p> <p><b>GEOL 1214:</b> More class time will be dedicated to review of the material;</p> <p><b>PHYS 1114:</b> The test questions will be revised to ensure that more subtle aspects of the scientific method are assessed;</p> <p><b>PHYS 1124:</b> The instrument will be revised to a typed format that will be used to test students on the more subtle aspects of the scientific method in experiments;</p> <p><b>PHYS 1214:</b> A simple experiment will be required of all students as the scientific method is discussed;</p> <p><b>PHYS 1224:</b> The instrument will be revised to a format that will more effectively test students on the more subtle aspects of the scientific method;</p>	
<p><b>2. Students will solve problems scientifically.</b> Students should:</p> <ol style="list-style-type: none"> <li>a. Be able to construct and test hypotheses using modern lab equipment (such as microscopes, scales, computer technology) and appropriate quantitative</li> </ol> <p style="text-align: center;">(Continued)</p>	<p><b>GEOL 1114:</b> Students were required to take a pre-test and a post-test regarding the problem solving process; <b>GEOL 1214:</b> Students were required to take a pre-test and a post-test regarding the problem solving process; <b>PHYS 1114:</b> Students were required to complete a force and</p>	<p><b>GEOL 1114:</b> Students' performance improved by an average of 61.8% on the post-test;</p> <p><b>GEOL 1214:</b> Students' performance improved by an average of 70.7% on the post-test;</p> <p><b>PHYS 1114:</b> 100% of the students met the benchmark of</p>	<p><b>GEOL 1114:</b> More class time will be dedicated to a review of the subject matter;</p> <p><b>GEOL 1214:</b> Students will be encouraged to attend additional study sessions outside of class time;</p> <p><b>PHYS 1114:</b> Other aspects of motion will be studied with additional</p>	

<p>methods.</p> <p>b. Be able to evaluate isolated observations about the physical universe and relate them to hierarchically organized explanatory frameworks (theories).</p>	<p>motion experiment, to form a hypothesis, and to test said hypothesis;</p> <p><b>PHYS 1124:</b> Students were required to conduct an electric circuits experiment and form a hypothesis on how current and voltage are related;</p> <p><b>PHYS 1214:</b> A computer based experiment related to kinematics and dynamics was required of all students;</p> <p><b>PHYS 1224:</b> Students were required to conduct an electric field mapping experiment, form a hypothesis related to current and voltage relationships, and test their hypothesis;</p>	<p>70% with a class average of 87.5%;</p> <p><b>PHYS 1124:</b> 100% of the students met the benchmark of 70% with a class mean of 90.6%;</p> <p><b>PHYS 1214:</b> 80% of the students met the benchmark of 70% with a class average of 88%;</p> <p><b>PHYS 1224:</b> 86% of the students met the benchmark of 70% with a class mean of 89% on the experiment;</p>	<p>quantitative analysis required;</p> <p><b>PHYS 1124:</b> In future classes, other aspects of Ohm’s Law will be studied and more quantitative analysis will be required;</p> <p><b>PHYS 1214:</b> In the future, other aspects of motion will be studied with more emphasis upon quantitative analysis;</p> <p><b>PHYS 1224:</b> In future classes, a more precise means of measurement will be prescribed;</p>	
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**Core Competencies Assessment 2009-2010: Area III Courses, cont.**

**New Mexico Junior College**

**Laboratory Science Competencies, cont.**

GE 114 Physical Geology; GE 124 Historical Geology; PH 114 General Physics I  
PH 124 General Physics II; PH 214 Engineering Physics I; PH 224 Engineering Physics II

GEOL 1114; GEOL 1214; PHYS 1114  
PHYS 1124; PHYS 1214; PHYS 1224

<u>State Competencies</u> (Learning Outcomes Being Measured)	<u>Assessment Procedures</u> (Process/Instrument named or described – rubric attached)	<u>Assessment Results</u>	<u>How Results Will Be Used To Make Improvements</u>	<u>(Optional)</u> Recommendations/Goals/ Priorities
<p><b>3. Students will communicate scientific information.</b> Students should: Communicate effectively about science (e.g., write lab reports in standard format and explain basic scientific concepts, procedures, and results using written, oral, and graphic presentation techniques.)</p> <p align="right">(Continued)</p>	<p><b>GEOL 1114:</b> Students were required to submit two critiques of geology related journal articles;</p> <p><b>GEOL 1214:</b> Students were required to complete a critique of geology-related journal articles;</p> <p><b>PHYS 1114:</b> Students were required to write laboratory reports in a standard format that included an introduction, procedure, data, analysis, error analysis, and conclusion;</p> <p><b>PHYS 1124:</b> Students were required to write laboratory reports in a standard format that included an introduction, procedure, data, analysis, error analysis, and conclusion;</p> <p><b>PHYS 1214:</b> Students were required to write laboratory</p>	<p><b>GEOL 1114:</b> The class performance surpassed the benchmark of a 70% successful completion of the assignment;</p> <p><b>GEOL 1214:</b> The mean score on the assignment was 86.6%;</p> <p><b>PHYS 1114:</b> 100% of the students met the benchmark with a class average of 87.5%;</p> <p><b>PH 1124:</b> 100% of the students met the benchmark of 70% with a class mean of 96%;</p> <p><b>PH 1214:</b> 100% of the students met the benchmark of 70%</p>	<p><b>GEOL 1114:</b> Students will be required to present an outline for review in future semesters;</p> <p><b>GEOL 1214:</b> Students will be required to submit a rough draft prior to the assignment due date;</p> <p><b>PHYS 1114:</b> In future semesters, students will be required to make an oral presentation of their lab reports;</p> <p><b>PHYS 1124:</b> In the future, students will be required to make an oral presentation of their lab reports;</p> <p><b>PHYS 1214:</b> In the future, students will be required to make an oral presentation</p>	

	<p>reports in a standard format that included an introduction, procedure, data, analysis, error analysis, and conclusion;  <b>PHYS 1224:</b> Students were required to write a laboratory report on Columb’s Law in a standard format that included an introduction, procedure, data, analysis, error analysis, and conclusion;</p>	<p>with a class average of 81%;   <b>PHYS 1224:</b> 83% of the students met the benchmark of 70% with a class mean of 79% on the required report;</p>	<p>of their lab reports;   <b>PHYS 1224:</b> In future classes, students will be required to make an oral presentation of their lab reports;</p>	
<p><b>4. Students will apply quantitative analysis to scientific problems.</b>  Students should:  a. Select and perform appropriate quantitative analyses of scientific observations.  b. Show familiarity with the metric system, use a calculator to perform appropriate mathematical operations, and present results in tables and graphs.</p> <p>(Continued)</p>	<p><b>GEOL 1114:</b> Students were required to submit a problem/solution paper with a problem topic related to course content;  <b>GEOL 1214:</b> Students were required to submit a research paper investigating a problem topic related to the course content;  <b>PHYS 1114:</b> Students were required to conduct a laboratory experiment on Newton’s Second Law of Motion;  <b>PHYS 1124:</b> Students were required to conduct a laboratory experiment on electric fields and tabulate and graph the results in metric format;  <b>PHYS 1214:</b> Students were required to conduct a laboratory experiment on Newton’s Second Law of Motion. The assignment required a tabulation and graphing of the data in metric format;  <b>PHYS 1224:</b> Students were required to conduct a laboratory experiment on Columb’s Law and its implications to electrostatics. The assignment required quantitative analysis of the observations and a tabulation and graphing of the results in metric format;</p>	<p><b>GEOL 1114:</b> 81.2% of the students submitted papers that met the benchmarked standard;   <b>GEOL 1214:</b> 80.2% of the students submitted papers that met the benchmarked standard;   <b>PHYS 1114:</b> 100% of the students met the benchmark of 70% with a class average of 93%;  <b>PHYS 1124:</b> 100% of the students met the benchmark of 70% on the experiment with a class mean of 100%;   <b>PHYS 1214:</b> 80% of the students met the benchmark of 70% with a class average of 75%;   <b>PHYS 1224:</b> 100% of the students met the benchmark of 70% with a class mean of 96%;</p>	<p><b>GEOL 1114:</b> Students will be required to submit an outline for review in future semesters;   <b>GEOL 1214:</b> Students will be required to present an outline for review prior to the assignment due date;   <b>PHYS 1114:</b> Students will be required to conduct multiple trials of the same apparatus;  <b>PHYS 1124:</b> In future classes, a more precise means of measurement will be employed;   <b>PHYS 1214:</b> Students will be required to conduct multiple trials and calculate an average of the experiment results;   <b>PHYS 1224:</b> The experimental method will be modified in future semesters to allow for a greater diversity of topics;</p>	

<p><b>5. Students will apply scientific thinking to real world problems.</b> Students should:</p> <p>a. Critically evaluate <i>scientific</i> reports or accounts presented in the popular media.</p> <p>b. Understand the basic scientific facts related to important contemporary issues (e.g., global warming, stem cell research, cosmology), and ask informed questions about those issues.</p> <p>End – Laboratory Science</p>	<p><b>GEOL 1114:</b> Students were required to submit a problem/solution paper with a problem topic related to the course content;</p> <p><b>GEOL 1214:</b> Students were required to submit a problem/solution paper with a problem topic related to the course content;</p> <p><b>PHYS 1114:</b> Students were required to research an online scientific report and conduct a critical evaluation of said report;</p> <p><b>PHYS 1124:</b> Students were required to investigate basic physics facts in modern communications and submit a journal report of their findings;</p> <p><b>PHYS 1214:</b> Students were required to discuss basic physics facts in infrastructure engineering and submit a journal report;</p> <p><b>PHYS 1224:</b> Students were required to investigate basic physics principles as employed in modern communications and submit a journal report of their findings;</p>	<p><b>GEOL 1114:</b> 81.2% of the students submitted papers that met the benchmarked standard;</p> <p><b>GEOL 1214:</b> 80.2% of the students submitted papers that met the benchmarked standard;</p> <p><b>PHYS 1114:</b> 100% of the students met the benchmark of 70% with a class average of 91%;</p> <p><b>PHYS 1124:</b> 100% of the students met the benchmark of 70% with a class mean of 97%;</p> <p><b>PHYS 1214:</b> 100% of the students met the benchmark of 70% with a class average of 100%;</p> <p><b>PHYS 1224:</b> 100% of the students met the benchmark of 70% with a class mean of 100%;</p>	<p><b>GEOL 1114:</b> Students will be required to present a rough draft of their assignments before the due date in future semesters;</p> <p><b>GEOL 1214:</b> Students will be required to present an outline for review prior to the assignment due date;</p> <p><b>PHYS 1114:</b> More class time will be devoted to a discussion of research techniques;</p> <p><b>PHYS 1124:</b> A field trip will be conducted to a local radio station whereby students will be granted the opportunity to explore the physics of radio communications;</p> <p><b>PHYS 1214:</b> More class time will be devoted to a discussion of infrastructure as related to engineering;</p> <p><b>PHYS 1224:</b> A field trip will be conducted to a local radio station whereby students will be granted the opportunity to explore the physics of radio communications;</p>	
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## Core Competencies Assessment 2009-2010: Area IV Courses

### New Mexico Junior College

GG 113 World/Regional Geography; SO 213 General Sociology;  
SO 223 Social Problems; SO 223W Marriage and the Family

### Social and Behavioral Sciences Competencies

GEOG 1113; SOCI 1113;  
SOCI 2113; SOCI 2213

<u>State Competencies</u> (Learning Outcomes Being Measured)	<u>Assessment Procedures</u> (Process/Instrument named or described – rubric attached)	<u>Assessment Results</u>	<u>How Results Will Be Used To Make Improvements</u>	<u>(Optional)</u> Recommendations/Goals/ Priorities
<p><b>1. Students will identify, describe and explain human behaviors and how they are influenced by social structures, institutions, and processes within the contexts of complex and diverse communities.</b></p> <p>Students should: Develop an understanding of self and the world by examining content and processes used by social and behavioral sciences to discover, describe, explain, and predict human behaviors and social systems.</p>	<p><b>GEOG 1113:</b> Students were required to research a particular country and focus on identifying, describing, and explaining human behaviors; <b>SOCI 1113:</b> Student performance was assessed by means of objective tests; <b>SOCI 2113:</b> Students were required to submit a critical thinking essay in response to a documentary film; <b>SOCI 2213:</b> Student performance was assessed by means of objective tests;</p>	<p><b>GEOG 1113:</b> 84% of the students met the benchmark of 75% on the portfolios;  <b>SOCI 1113:</b> 87.2% of the students met the benchmark of 70%; <b>SOCI 2113:</b> 84% of the students met the benchmark of 70% on the essay assignment;  <b>SOCI 2213:</b> 83.5% of the students met the benchmark of 70%;</p>	<p><b>GEOG 1113:</b> In future classes, students will be paired in making joint presentations which will increase the diversity of the countries researched; <b>SOCI 1113:</b> More variety in teaching methodology will be incorporated into future classes; <b>SOCI 2113:</b> Additional resource information will be provided to students prior to the assignment;  <b>SOCI 2213:</b> More variety in teaching methodology will be incorporated into future classes;</p>	
<p><b>2. Students will articulate how beliefs, assumptions, and values are influenced by factors such as politics, geography, economics, culture, biology, history, and social institutions.</b></p> <p>Students should: Enhance knowledge of social and cultural institutions and the values of their society and other societies and cultures in the world.</p>	<p><b>GEOG 1113:</b> Students were required to research how various countries beliefs, assumptions, and values are influenced by factors such as politics, geography, economics, and culture; <b>SOCI 1113:</b> Student performance was assessed by means of objective tests; <b>SOCI 2113:</b> Students were required to submit an essay addressing sociological concepts and their effect upon culture, history, and social institutions; <b>SOCI 2213:</b> Student performance was assessed by means of objective tests;</p>	<p><b>GEOG 1113:</b> 94% of the students met the benchmark of 75% on their research project;  <b>SOCI 1113:</b> 86.4% of the students met the benchmark of 70%; <b>SOCI 2113:</b> 84% of the students met the benchmark of 80% on the essay assignment;  <b>SOCI 2213:</b> 83.75% of the students met the benchmark of 70%;</p>	<p><b>GEOG 1113:</b> In future classes, additional requirements will be added to the portfolios in order to broaden the focus of the assignment;  <b>SOCI 1113:</b> Each item in the test bank will be analyzed to determine the reliability of the test question; <b>SOCI 2113:</b> In future classes, more class time will be devoted to a study of the impact of concepts on society;  <b>SOCI 2213:</b> Each item in the test bank will be analyzed to determine the reliability of the test question;</p>	

(Continued)

**Core Competencies Assessment 2009-2010: Area IV Courses, cont.**

**New Mexico Junior College**  
 GG 113 World/Regional Geography; SO 213 General Sociology  
 SO 223 Social Problems; SO 223W Marriage and the Family

**Social and Behavioral Sciences Competencies, cont.**  
 GEOG 1113; SOCI 1113;  
 SOCI 2113; SOCI 2213

<u><b>State Competencies</b></u> (Learning Outcomes Being Measured)	<u><b>Assessment Procedures</b></u> (Process/Instrument named or described – rubric attached)	<u><b>Assessment Results</b></u>	<u><b>How Results Will Be Used To Make Improvements</b></u>	<u><b>(Optional)</b></u> Recommendations/Goals/ Priorities
<p><b>3. Students will describe ongoing reciprocal interactions among self, society, and the environment.</b>                      Students should:                      Understand the interdependent nature of the individual, family/social group, and society in shaping human behavior and determining quality of life.</p>	<p><b>GEOG 1113:</b> Students were required to submit a portfolio describing the interactions existing between self, society, and the environment in a particular country;  <b>SOCI 1113:</b> Student performance was assessed by means of objective tests;   <b>SOCI 2113:</b> Students were required to submit a critique of a documentary film;  <b>SOCI 2213:</b> Student performance was assessed by means of objective tests;</p>	<p><b>GEOG 1113:</b> 94% of the students met the benchmark of 75% on the portfolio;   <b>SOCI 1113:</b> 82.2% of the students met the benchmark of 70%;   <b>SOCI 2113:</b> 84% of the students met the benchmark of 70% on the critique;  <b>SOCI 2213:</b> 85.7% of the students met the benchmark of 70%;</p>	<p><b>GEOG 1113:</b> More class time will be dedicated to discussion and application of the research findings;   <b>SOCI 1113:</b> More class time will be devoted to a study of the relationships among self, society, and the environment;  <b>SOCI 2113:</b> More class time will be devoted to critical thinking exercises;   <b>SOCI 2213:</b> More class time will be devoted to studying the family’s role in shaping human behavior;</p>	
<p><b>4. Students will apply the knowledge base of the social and behavioral sciences to identify, describe, explain, and critically evaluate relevant issues, ethical dilemmas, and arguments. –</b>                      Students should:                      Articulate their role in a global context and develop an awareness and appreciation for diverse value systems in order to understand how to be good citizens who can critically examine and work toward quality of life within a framework of understanding and justice.</p> <p>End – Social/Behavioral Sciences</p>	<p><b>GEOG 1113:</b> Students were required to research relevant issues, ethical dilemmas, and arguments as they pertain to a particular country;  <b>SOCI 1113:</b> Student performance was assessed by means of objective tests;  <b>SOCI 2113:</b> Students were required to submit an essay addressing ethical issues in sociology;  <b>SOCI 2213:</b> Student performance was assessed by means of objective tests;</p>	<p><b>GEOG 1113:</b> 94% of the students met the benchmark of 75% on the research project;   <b>SOCI 1113:</b> 86.2% of the students met the benchmark of 70%;  <b>SOCI 2113:</b> 74% of the students met the benchmark of 70% on the essay assignment;   <b>SOCI 2213:</b> 84.5% of the students met the benchmark of 70%;</p>	<p><b>GEOG 1113:</b> More class time will be devoted to the application of information regarding current events in the countries that are researched;   <b>SOCI 1113:</b> In future classes, this outcome will be assessed by means of a research paper;  <b>SOCI 2113:</b> In future classes, more class time will be devoted to a study of ethical issues;   <b>SOCI 2213:</b> In future classes, this outcome will be assessed by means of a research paper;</p>	

## Core Competencies Assessment 2009-2010: Area V Courses

### New Mexico Junior College

HI 113 United States History to 1877; HI 113A History of New Mexico;  
 HI 123 United States History From 1877; HI 213 History of Civilization I  
 HI 223 History of Civilization II; PI 213 Introduction to Philosophy; RE 113 World Religion

### Humanities and Fine Arts Competencies

HIST 1113; HIST 2113;  
 HIST 1123; HIST 1053;  
 HIST 1063; PHIL 1113; RELI 1213

<u>State Competencies</u> (Learning Outcomes Being Measured)	<u>Assessment Procedures</u> (Process/Instrument named or described – rubric attached)	<u>Assessment Results</u>	<u>How Results Will Be Used To Make Improvements</u>	<u>(Optional)</u> Recommendations/Goals/ Priorities
<p><b>1. Students will analyze and critically interpret significant and primary texts and/or works of art (this includes fine art, literature, music, theatre, and film.)</b></p> <p style="text-align: right;">(Continued)</p>	<p><b>HIST 1113:</b> Students were required to submit a paper on the historical implications of Uncle Tom’s Cabin;  <b>HIST 2113:</b> Students were required to submit a written paper addressing the diversity of peoples in northern New Mexico;  <b>HIST 1123:</b> Students were required to submit a written paper addressing the use of the atomic bomb in World War II;  <b>HIST 1053:</b> Students were required to answer multiple choice, matching, and essay questions covering the Ancient Near East;  <b>HIST 1063:</b> Students were required to submit a written paper on topics assigned in class;</p> <p><b>PHIL 1113:</b> Students were required to submit an essay addressing the Socratic method;</p> <p><b>RELI 1213:</b> Students were required to submit an essay addressing the five great relationships in Confucianism and explain how these relationships influence social interaction and status;</p>	<p><b>HIST 1113:</b> 67% of the students met the benchmark of 75%;</p> <p><b>HIST 2113:</b> 75% of the students adequately addressed the diversity issues;</p> <p><b>HIST 1123:</b> 84.8% of the students met the benchmark of 75% on the assignment;</p> <p><b>HIST 1053:</b> 50% of the students met the benchmark of 75% on the assessments;</p> <p><b>HIST 1063:</b> 90% of the students correctly defined the topic while only 67% adequately clarified Kant’s interpretation of enlightenment;</p> <p><b>PHIL 1113:</b> 85% of the students completed the assignment at an appropriate level of comprehension;</p> <p><b>RELI 1213:</b> 82.5% of the students met the benchmark of 75% on the essay assignment;</p>	<p><b>HIST 1113:</b> In future classes, greater emphasis will be placed upon appropriate writing style and upon citing of primary sources;  <b>HIST 2113:</b> The essay assignment will be revised in order to improve student comprehension;</p> <p><b>HIST 1123:</b> Additional class time will be devoted to a discussion of diverse points of view;</p> <p><b>HIST 1053:</b> Different approaches to the delivery of historical information will be investigated;</p> <p><b>HIST 1063:</b> In future classes, the topic question will be replaced with an essay assignment;</p> <p><b>PHIL 1113:</b> In future classes, the CPS system will be employed to improve student participation;</p> <p><b>RELI 1213:</b> More online interaction will be required in the discussion of the Confucianism relationships and more class time will be devoted to research techniques;</p>	



<p><b>2. Students will compare art forms, modes of thought and expression, and processes across a range of historical periods and/or structures (such as political, geographic, economic, social, cultural, religious, and intellectual).</b></p>	<p><b>HIST 1113:</b> Students were required to submit an essay addressing the interrelationships among politics, culture, and history;  <b>HIST 2113:</b> Students were required to submit an essay which compared and contrasted Spanish rule with that of independent Mexico;  <b>HIST 1123:</b> Students were required to submit a written paper addressing historical perspectives in a time of war and were assessed by means of written exams;  <b>HIST 1053:</b> Students were required to complete an essay covering the three major belief systems and how differences among these belief systems have led to unrest in the twenty-first century;  <b>HIST 1063:</b> Students were required to complete an essay assignment on the effect of Rousseau’s social contract on modern democratic societies;  <b>PHIL 1113:</b> Students were required to submit a composition which compared and contrasted ontological theories;  <b>RELI 1213:</b> Students were required to submit an essay addressing the life of Siddhartha Gautama, the Buddha, in the form of a biographic profile;</p>	<p><b>HIST 1113:</b> 80.5% of the students met the benchmark of 75% on the essay;  <b>HIST 2113:</b> 73% of the students adequately completed an analysis of the two forms of rule;  <b>HIST 1123:</b> 85.3% of the students met the benchmark of 75% on the written assignment while 90% of the students met the benchmark of 75% on the exam questions;  <b>HIST 1053:</b> 20% of the students met the benchmark of 75% on this essay;  <b>HIST 1063:</b> 80% of the students correctly defined the topic while 70% adequately described the influence of Rousseau;  <b>PHIL 1113:</b> 88% of the students successfully articulated the differences among the theories;  <b>RELI 1213:</b> 70.5% of the students met the benchmark of 75% on the essay assignment;</p>	<p><b>HIST 1113:</b> In future classes, greater emphasis will be placed upon historical expression and cultural diversity;  <b>HIST 2113:</b> In future classes, more class time will be devoted to a study of the two forms of rule;  <b>HIST 1123:</b> In future classes, increased emphasis will be placed upon the significance of individuals’ beliefs and values and additional time will be spent preparing for the examinations;  <b>HIST 1053:</b> More class time will be devoted to research techniques and elements of good composition;  <b>HIST 1063:</b> Additional class time will be devoted to instruction related to the essay requirement;  <b>PHIL 1113:</b> In future classes, more class time will be devoted to a discussion of ontological theories;  <b>RELI 1213:</b> The class information and resource materials will be amended in an attempt to improve student comprehension;</p>	
<p><b>3. Students will recognize and articulate the diversity of human experience across a range of historical periods and/or cultural perspectives.</b></p> <p>(Continued)</p>	<p><b>HIST 1113:</b> Students were required to research a topic related to the diversity of human experience;  <b>HIST 2113:</b> Students were required to complete a written assignment addressing the influence of specific conflicts between native Indians and the Mexican ruling class;  <b>HIST 1123:</b> Students were</p>	<p><b>HIST 1113:</b> 84.8% of the students met the benchmark of 75% on the assignment;  <b>HIST 2113:</b> 70% of the students met the benchmark of 70% on the assignment;  <b>HIST 1123:</b> 80.2% of the</p>	<p><b>HIST 1113:</b> In future classes, debate, role-playing, and class discussion will be used to convey the historical perspectives;  <b>HIST 2113:</b> Additional class time will be devoted to a discussion of specific conflicts and their influences on New Mexico history;  <b>HIST 1123:</b> Classroom discussion</p>	

<p>(Continued)</p>	<p>required to submit a written paper addressing perspectives from actual soldiers, governmental decision makers, and modern day scholars;  <b>HIST 1053:</b> Students were required to complete an essay question covering the contributions of the Ancient Near East, Greece, and Rome to present day civilizations;  <b>HIST 1063:</b> Students were required to complete an essay addressing the influence of the Enlightenment on world progress;  <b>PHIL 1113:</b> Student performance was assessed by means of an objective test;  <b>RELI 1213:</b> Students were required to submit an essay addressing social, political, and economic changes in the Chinese society and discuss the influence of outside political forces on traditional Chinese thought. Additionally, students were assessed by means of written tests and an oral presentation;</p>	<p>students met the benchmark of 75% on the written assignment;  <b>HIST 1053:</b> 50% of the students met the benchmark of 75% on the assignment;  <b>HIST 1063:</b> 94% of the students submitted essays that correctly addressed the influence of the Enlightenment;  <b>PHIL 1113:</b> 75% of the students met the benchmark of 70% on the test questions;  <b>RELI 1213:</b> 77.5% of the students met the benchmark of 75% on the essay assignment while 73% of the students met the benchmark of 80% on the tests and on the oral presentation;</p>	<p>will be enhanced in order to place a greater emphasis upon self, society, and the environment;  <b>HIST 1053:</b> Additional class time will be devoted to effective composition and teaching methodologies;  <b>HIST 1063:</b> In future classes, the scope of the topic will be limited to some degree in order to more accurately focus student research;  <b>PHIL 1113:</b> In future classes, more class time will be devoted to a study of philosophical concepts;  <b>RELI 1213:</b> This assessment methodology will be continued in future classes but more diversity in topics will be incorporated into the assignment. Also, more class time will be devoted to the oral presentation requirements;</p>	
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**Core Competencies Assessment 2009-2010: Area V Courses, cont.**

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**Humanities and Fine Arts Competencies, cont.**

HIST 1113; HIST 2113;  
 HIST 1123; HIST 1053;  
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<p><b>4. Students will draw on historical and/or cultural perspectives to evaluate any or all of the following: contemporary problems/issues, contemporary modes of expression, and contemporary thought.</b></p> <p>For all Humanities and Fine Arts Competencies, students should: Possess an understanding of the present that is informed by an awareness of past heritages in human history, arts, philosophy, religion, and literature, including the complex and interdependent relationships among cultures.</p> <p>Note: For the purposes of the Humanities and Fine Arts requirement, courses will come from the areas of History, Philosophy, Literature, Art, Dance, Music, Theatre and those offerings from other disciplines that also include, among other criteria, analytical study of primary texts and /or works of art as forms of cultural and creative expression. This requirement does not include work in areas such as studio and performance courses or courses that are primarily skills-oriented. The requirements must be fulfilled by courses from two</p> <p align="center">(Continued)</p>	<p><b>HIST 1113:</b> Students were required to identify a present day scandal and compare said scandal to the Jefferson-Hemings scandal;</p> <p><b>HIST 2113:</b> Students were required to submit an essay addressing the implications of land grant issues on New Mexico statehood;</p> <p><b>HIST 1123:</b> Students were required to submit a written essay addressing the role of presidential decision-making;</p> <p><b>HIST 1053:</b> Students were required to complete an essay related to the three major belief systems (Judaism, Christianity, and Muslim)</p> <p><b>HIST 1063:</b> Students were required to submit an essay addressing the influences of Rousseau’s ideology;</p> <p><b>PHIL 1113:</b> Student performance was assessed by means of open-ended questions on the final examination;</p> <p><b>RELI 1213:</b> Students were required to submit an essay which identified the Buddhist Eight-Fold Path and explained the relevance of Buddhist thought in western cultural terms;</p>	<p><b>HIST 1113:</b> 83.9% of the students met the benchmark of 75% on the comparison paper;</p> <p><b>HIST 2113:</b> 75% of the students met the benchmark of 70% on the assignment;</p> <p><b>HIST 1123:</b> 78.2% of the students met the benchmark of 75% on the essay;</p> <p><b>HIST 1053:</b> 20% of the students met the benchmark of 75% on this essay;</p> <p><b>HIST 1063:</b> 77% of the students completed the assignment at an appropriate level of understanding;</p> <p><b>PHIL 1113:</b> 95% of the students successfully applied an ethical theory to analyze a contemporary issue;</p> <p><b>RELI 1213:</b> 81% of the students met the benchmark of 75% on the essay assignment;</p>	<p><b>HIST 1113:</b> In future classes, the essay assignment will be modified in order to improve student comprehension;</p> <p><b>HIST 2113:</b> More class time will be devoted to an analysis of land grant issues;</p> <p><b>HIST 1123:</b> In future classes, more critical thinking activities will be incorporated into the class experience;</p> <p><b>HIST 1053:</b> Further class time will be devoted to better methods of preparing students to write historical compositions;</p> <p><b>HIST 1063:</b> Essay assignment stipulations will be revised in order to improve student comprehension;</p> <p><b>PHIL 1113:</b> A more diverse range of topics will be addressed in future classes;</p> <p><b>RELI 1213:</b> In future classes, the essay assignment will be revised to improve student comprehension of the assignment requirements;</p>	

different disciplines. End – Humanities/Fine Arts				
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Area V Assessment Contact Person

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**August 1, 2010**

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