

The University of New Mexico-Valencia Core Competencies Report

Date Submitted September 30, 2008

Attachments (please check all that apply):

Area I Communications *Contact Person* _____

Area II Math—Algebra *Contact Person* _____

Area II Math—Calculus *Contact Person* _____

Area II Math—Other Math *Contact Person* _____

Area III Laboratory Science *Contact Person* Claudia Barreto,barr@unm.edu

Area IV Social/Behavioral Sciences *Contact Person* _____

Area V Humanities/Fine Arts *Contact Person* _____

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

Attested:

Chief Academic Officer Signature

Reinaldo A. Z. Garcia, Dean of Instruction
Chief Academic Officer Printed Name

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Institutional URL for HED Core Competencies Assessment Reports:

<http://www.unm.edu/~assess/SupportingFiles/HEDGenEdCoreCourseAssmtReport2008-9-30-UMN-V.pdf>

Core Competencies Assessment 2007-2008: Area I Courses

The University of New Mexico-Valencia

Communications Competencies

<u>State Competencies</u> (Learning Outcomes Being Measured)	<u>Assessment Procedures</u> Course Name and NMCCN (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>1. Students will analyze and evaluate oral and written communication in terms of situation, audience, purpose, aesthetics, and diverse points of view. Students should: Understand, appreciate, and critically evaluate a variety of written and spoken messages in order to make informed decisions.</p>	<p>As departments that offer courses in the undergraduate general education core curriculum on the Albuquerque Campus develop student learning objectives (SLOs) and plans to assess mastery of those desired learning outcomes, the University's four branch campuses have begun to use those same SLOs and measurement strategies in the same courses offered on their campuses as well.</p>			
<p>2. Students will express a primary purpose in a compelling statement and order supporting points logically and convincingly. Students should: Organize their thinking to express their viewpoints clearly, concisely, and effectively.</p>	<p>The UNM-Valencia Campus offers as an example BIOL 123 "Biology for Health-Related Sciences" in Area III below.</p>			
<p>3. Students will use effective rhetorical strategies to persuade, inform, and engage. 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>				

Core Competencies Assessment 2007-2008: Area I Courses

The University of New Mexico-Valencia

Communications Competencies

<u>State Competencies</u> (Learning Outcomes Being Measured)	<u>Assessment Procedures</u> Course Name and NMCCN (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>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. Students should: Use standard processes for generating documents or oral presentations independently and in groups.</p>				
<p>5. Students will integrate research correctly and ethically from credible sources to support the primary purpose of a communication. Students should: Gather legitimate information to support ideas without plagiarizing, misinforming or distorting.</p>				
<p>6. Students will engage in reasoned civic discourse while recognizing the distinctions among opinions, facts, and inferences. Students should: Negotiate civilly with others to accomplish goals and to function as responsible citizens. End -- Area I</p>				

Area I Assessment Contact Person:

Name

Date

Phone number:

Core Competencies Assessment 2007-2008: Area II Courses

The University of New Mexico-Valencia

Mathematics - Algebra Competencies

<u>State Competencies</u> (Learning Outcomes Being Measured)	<u>Assessment Procedures</u> Course Name and NMCCN (Process/Instrument named or described – rubric attached)	<u>Assessment Results</u>	How Results Will Be Used To Make <u>Improvements</u>	<u>(Optional)</u> Recommendations/Goals/Priorities
<p>1. Students will graph functions Students should:</p> <ul style="list-style-type: none"> a. Sketch the graphs of linear, higher-order polynomial, rational, absolute value, exponential, logarithmic, and radical functions. 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. c. Determine the vertex, axis of symmetry, maximum or minimum, and intercepts of a quadratic equation. 				
<p>2. Students will solve various kinds of equations. Students should:</p> <ul style="list-style-type: none"> a. Solve quadratic equations using factoring, completing the squares, the square root method, and quadratic formula. b. Solve exponential and logarithmic equations. c. Solve systems of two or three linear equations. <p style="text-align: center;">(Continued)</p>				
<p>3. Students will demonstrate the use of function notation and perform operations on functions.</p>				

Core Competencies Assessment 2007-2008: Area II Courses

The University of New Mexico-Valencia

Mathematics - Algebra Competencies

Students should: a. Find the value of a function for a given domain value b. Add, subtract, multiply, divide and compose functions. c. Determine the inverse of a function. d. Compute the difference quotient for a function. e. Correctly use function notation and vocabulary related to functions, i.e. domain, range, independent variable, of, even symmetry, etc.				
4. Students will model/solve real-world problems. Students should: a. Use and understand slope as a rate of change. b. Use equations and systems of equations to solve application problems. c. Apply knowledge of functions to solve specific application problems. d. Solve compound interest problems. e. Solve application problems involving maximization or minimization of a quadratic function. f. Solve exponential growth and decay problems. End – Area II - Algebra				

Area II-Algebra Assessment Contact Person:

Name

Date

Phone number:

Core Competencies Assessment 2007-2008: Area II Courses

The University of New Mexico-Valencia

Mathematics - Calculus Competencies

<u>State Competencies</u> (Learning Outcomes Being Measured)	<u>Assessment Procedures</u> Course Name and NMCCN (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>1. Students will demonstrate an understanding of the theoretical, geometrical underpinnings of the calculus. Students should: Algebraically and graphically demonstrate an understanding of:</p> <ul style="list-style-type: none"> a. Limit b. Tangent line c. Difference quotient d. Fundamental theorem of calculus e. Riemann sums 				
<p>2. Students will use concepts of function, limit, continuity, derivative, and integral. Students should: Apply the theory of calculus through manipulations involving:</p> <ul style="list-style-type: none"> a. The finding of limits. b. Using differentiation techniques. c. Working with transcendental & trigonometric functions. d. Determining points of discontinuity and intervals of continuity. 				
<p>3. Students will apply methods of calculus to optimization, graphing, and approximation. Students should be able to:</p> <ul style="list-style-type: none"> a. Find extreme points. b. Understand the graphs of a 				

Core Competencies Assessment 2007-2008: Area II Courses

The University of New Mexico-Valencia

Mathematics - Calculus Competencies

<u>State Competencies</u> (Learning Outcomes Being Measured)	<u>Assessment Procedures</u> Course Name and NMCCN (Process/Instrument named or described – rubric attached)	<u>Assessment Results</u>	How Results Will Be Used To Make <u>Improvements</u>	<u>(Optional)</u> Recommendations/Goals/Priorities
function and its 1 st and 2 nd derivatives and how they relate. c. Apply Newton’s method. d. Use differentials to approximate functions.				
4. Students will apply differential and integral calculus to problems in geometry, physics, and other fields. Students should: a. Understand that calculus has many uses in science, business, and other fields. b. Students should be able to solve application problems involving rates of change, optimization, related rates, and acceleration/velocity. End Area II – Calculus I				

Area II-Calculus Assessment Contact Person:

Name

Date

Phone number:

Core Competencies Assessment 2007-2008: Area II Courses

The University of New Mexico-Valencia

Mathematics - Other College-Level Mathematics Competencies

<u>State Competencies</u> (Learning Outcomes Being Measured)	<u>Assessment Procedures</u> Course Name and NMCCN (Process/Instrument named or described – rubric attached)	<u>Assessment Results</u>	How Results Will Be Used To Make <u>Improvements</u>	<u>(Optional)</u> Recommendations/Goals/Priorities
<p>1. Students will display, analyze, and interpret data. Students should:</p> <ul style="list-style-type: none"> a. Discriminate among different types of data displays for the most effective presentation. b. Draw conclusions from the data presented. c. Analyze the implication of the conclusion to real life situations. 				
<p>2. Students will demonstrate knowledge of problem-solving strategies. Students should:</p> <ul style="list-style-type: none"> a. For a given problem, gather and organize relevant information. b. Choose an effective strategy to solve the problem c. Express and reflect on the reasonableness of the solution to the problem. 				
<p>3. Students will construct valid mathematical explanations. Students should: Use mathematics to model and explain real life problems.</p>				
<p>4. Students will display an understanding of the development of mathematics. Students should:</p>				

Core Competencies Assessment 2007-2008: Area II Courses

The University of New Mexico-Valencia

Mathematics - Other College-Level Mathematics Competencies

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.				
5. Students will demonstrate an appreciation for the extent, application, and beauty of mathematics. Students should: Recognize the inherent value of mathematical concepts, their connection to structures in nature, and their implications for everyday life. End – Area II Other Math				

Area II-Other Math Assessment Contact Person:

Name

Date

Phone number:

Core Competencies Assessment 2007-2008: Area III Courses

The University of New Mexico-Valencia

Laboratory Science Competencies

<u>State Competencies</u> (Learning Outcomes Being Measured)	<u>Assessment Procedures</u> Course Name and NMCCN (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>1. Students will describe the process of scientific inquiry. Students should:</p> <ul style="list-style-type: none"> a. Understand that scientists rely on evidence obtained from observations rather than authority, tradition, doctrine, or intuition. b. Students should value science as a way to develop reliable knowledge about the world. 	<p>BIOL 123 “Biology for Health-Related Sciences” (NMCCN=BIOL 1113) In Spring 2008 14 questions from one unit exam (N=77) and 7 questions from an exam (N=74) over a different unit were scored for all students in two sections of the course to determine mastery of a course learning outcome addressing Area III Competencies 2 and 3 in this cycle..</p>		<p>On the exam for each unit, where wrong answers for a given question exceeded 20% of all answers, a remedial action was proposed. This resulted in action plans to address 8 of 14 questions in the first exam and 6 of 7 questions in the second exam. In almost all cases these action plans are pedagogical strategies for reinforcing concepts.</p>	
<p>2. Students will solve problems scientifically. Students should:</p> <ul style="list-style-type: none"> a. Be able to construct and test hypotheses using modern lab equipment (such as microscopes, scales, computer technology) and appropriate quantitative methods. b. Be able to evaluate isolated observations about the physical universe and relate them to hierarchically organized explanatory frameworks (theories). 		<p>73% of responses to target questions on the first unit exam and 73% of responses to target questions on second unit exam were correct.</p>		
<p>3. Students will communicate scientific information. 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>73% of responses to target questions on the first unit exam and 73% of responses to target questions on second unit exam were correct.</p>		

Core Competencies Assessment 2007-2008: Area III Courses

The University of New Mexico-Valencia

Laboratory Science Competencies

<u>State Competencies</u> (Learning Outcomes Being Measured)	<u>Assessment Procedures</u> Course Name and NMCCN (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>4. Students will apply quantitative analysis to scientific problems. Students should:</p> <ul style="list-style-type: none"> 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>5. Students will apply scientific thinking to real world problems. Students should:</p> <ul style="list-style-type: none"> a. Critically evaluate scientific reports or accounts presented in the popular media. 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 style="text-align: center;">End - Lab Science</p>				

Area III Assessment Contact Person:

Claudia Barreto, Assoc. Professor, UNM-V.
Name

9-30-2008
Date

Phone number: 505.925-8500

Core Competencies Assessment 2007-2008: Area IV Courses

The University of New Mexico-Valencia

Social and Behavioral Sciences Competencies

<p align="center"><u>State Competencies</u> (Learning Outcomes Being Measured)</p>	<p align="center"><u>Assessment Procedures</u> Course Name and NMCCN (Process/Instrument named or described – rubric attached)</p>	<p align="center"><u>Assessment Results</u></p>	<p align="center">How Results Will Be Used To Make <u>Improvements</u></p>	<p align="center"><u>(Optional)</u> Recommendations/Goals/Priorities</p>
<p>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. 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>2. Students will articulate how beliefs, assumptions, and values are influenced by factors such as politics, geography, economics, culture, biology, history, and social institutions. 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>3. Students will describe ongoing reciprocal interactions among self,</p>				

Core Competencies Assessment 2007-2008: Area IV Courses

The University of New Mexico-Valencia

Social and Behavioral Sciences Competencies

<p><u>State Competencies</u> (Learning Outcomes Being Measured)</p>	<p><u>Assessment Procedures</u> Course Name and NMCCN (Process/Instrument named or described – rubric attached)</p>	<p><u>Assessment Results</u></p>	<p>How Results Will Be Used To Make <u>Improvements</u></p>	<p><u>(Optional)</u> Recommendations/Goals/Priorities</p>
<p>society, and the environment. 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>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. – 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>				

Area IV Assessment Contact Person:

Name

Date

Phone number:

Core Competencies Assessment 2007-2008: Area V Courses

The University of New Mexico-Valencia

Humanities and Fine Arts Competencies

<u>State Competencies</u> (Learning Outcomes Being Measured)	<u>Assessment Procedures</u> Course Name and NMCCN (Process/Instrument named or described – rubric attached)	<u>Assessment Results</u>	How Results Will Be Used <u>To Make Improvements</u>	<u>(Optional)</u> Recommendations/Goals/Priorities
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.)				
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).				
3. Students will recognize and articulate the diversity of human experience across a range of historical periods and/or cultural perspectives.				

Core Competencies Assessment 2007-2008: Area V Courses

The University of New Mexico-Valencia

Humanities and Fine Arts Competencies

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.

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.

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 different disciplines.

End – Humanities/Fine Arts

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Area V Assessment Contact Person:

Name

Date

Phone number:

Learning Outcomes Assessment Rubrics C & J 130: Public Speaking

Needs Work	Competent	Excellent	NA (does not apply or no way to tell)		
1	2	3	4	5	6

A. Students were able to demonstrate a clear interactional goal.

- | | | | | | | |
|---|---|---|---|---|---|---|
| 1. The interactional goal (thesis, purpose statement) was clear and appropriate for the audience..... | 1 | 2 | 3 | 4 | 5 | 6 |
| 2. The information was connected to the purpose of the presentation..... | 1 | 2 | 3 | 4 | 5 | 6 |
| 3. The speech's relevance to the audience was established..... | 1 | 2 | 3 | 4 | 5 | 6 |

COMMENTS:

B. Students were able to express information with clarity.

- | | | | | | | |
|---|---|---|---|---|---|---|
| 4. Information was presented with clear explanations when necessary..... | 1 | 2 | 3 | 4 | 5 | 6 |
| 5. Examples were used to help clarify when necessary..... | 1 | 2 | 3 | 4 | 5 | 6 |
| 6. The speaker assisted audience comprehension through the use of visual aids when appropriate..... | 1 | 2 | 3 | 4 | 5 | 6 |

COMMENTS:

C. Students were able to synthesize information in a logical and organized structure.

- | | | | | | | |
|---|---|---|---|---|---|---|
| 7. Ideas were structured using an appropriate organizational pattern..... | 1 | 2 | 3 | 4 | 5 | 6 |
| 8. The organizational pattern was easy for the audience to follow..... | 1 | 2 | 3 | 4 | 5 | 6 |
| 9. The organizational pattern was appropriate for the interactional goal..... | 1 | 2 | 3 | 4 | 5 | 6 |

COMMENTS:

D. Students were able to utilize ample support for their arguments.

- | | | | | | | |
|---|---|---|---|---|---|---|
| 10. Ideas were supported with credible forms of elaboration when necessary..... | 1 | 2 | 3 | 4 | 5 | 6 |
| 11. Ideas were supported with relevant forms of elaboration..... | 1 | 2 | 3 | 4 | 5 | 6 |
| 12. The support was appropriate to the audience..... | 1 | 2 | 3 | 4 | 5 | 6 |

COMMENTS:

E. Students were able to demonstrate extemporaneous speech delivery.

- | | | | | | | |
|--|---|---|---|---|---|---|
| 13. The speech was well prepared..... | 1 | 2 | 3 | 4 | 5 | 6 |
| 14. The speech had a practiced flow..... | 1 | 2 | 3 | 4 | 5 | 6 |
| 15. The speaker did not read from a manuscript, rather the speaker appeared to talk to the audience..... | 1 | 2 | 3 | 4 | 5 | 6 |

COMMENTS:

F. Students were able to demonstrate speaking fluency.

- | | | | | | | |
|--|---|---|---|---|---|---|
| 16. The speaker avoided distracting grammatical errors..... | 1 | 2 | 3 | 4 | 5 | 6 |
| 17. The speaker avoided using excessive verbal fillers (such as “like”
and “you know”) or disfluencies (“ah” or “umh”)..... | 1 | 2 | 3 | 4 | 5 | 6 |
| 18. The speaker used language appropriate to the audience and
interactional goal..... | 1 | 2 | 3 | 4 | 5 | 6 |

COMMENTS:

G. Students were able to present using good vocal quality.

- | | | | | | | |
|---|---|---|---|---|---|---|
| 19. Rate of speech was appropriate..... | 1 | 2 | 3 | 4 | 5 | 6 |
| 20. Volume of speech was appropriate..... | 1 | 2 | 3 | 4 | 5 | 6 |
| 21. The speaker used vocal inflections rather than a monotone delivery..... | 1 | 2 | 3 | 4 | 5 | 6 |
| 22. Pronunciation and articulation was clear..... | 1 | 2 | 3 | 4 | 5 | 6 |

COMMENTS:

H. Students were able to demonstrate physical behaviors that support the verbal message.

- | | | | | | | |
|--|---|---|---|---|---|---|
| 23. The speaker’s posture was appealing and appropriate..... | 1 | 2 | 3 | 4 | 5 | 6 |
| 24. Gestures were used effectively..... | 1 | 2 | 3 | 4 | 5 | 6 |
| 25. The speaker had good eye contact with the audience..... | 1 | 2 | 3 | 4 | 5 | 6 |
| 26. Movement was used effectively and appropriately..... | 1 | 2 | 3 | 4 | 5 | 6 |

COMMENTS: