

Monroe County Community College General Education Competency Assessment
Instructional Aggregate Data Report
Fall 2015 through Fall 2016 and Winter 2016 through Winter 2017 Data Collection Cycles
Prepared By: Quri R. Wygonik, Coordinator of Institutional Research, Evaluation, and Assessment
February 2018

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*Fall 2015 through Fall 2016 and Winter 2016 through Winter 2017
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Office of Institutional Research, Evaluation and Assessment

February 2018

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Report Description: The following report summarizes the mean general education instructional competency scores demonstrated by students and reported by Monroe County Community College faculty during either Fall 2016 through Fall 2017 or Winter 2016 through Winter 2017 data collection cycles. Each competency (Computer Literacy, Social Systems, Human Experience, Writing, Mathematics, and Science), the individual mean skill mastery score for respective learning objectives, and the mean score across all respective learning objectives are described in the following sections. The aggregate data collection sheets completed by faculty and the rubrics used to assess student performance of learning objectives within each competency are included in **Appendices A-F**.

If you have any questions or would like further information regarding this report, feel free to contact Quri R. Wygonik, Coordinator of Institutional Research, Evaluation and Assessment at qwygonik@monroeccc.edu or (734) 348- 4237, in the office of Institutional Research, Evaluation and Assessment (A-124).

Data Collection Cycle: Fall 2015 through Fall 2016

Number of sections: 50 sections

Median Class Size: 17.5 students

GOAL: COMMUNICATION

COMPETENCY: COMPUTER LITERACY (UNDERSTAND AND APPLY CURRENT AND APPROPRIATE TECHNOLOGY TOOLS AND RESOURCES)

Learning Outcome: Students will use computer technology to retrieve and communicate information.

Learning Objective	*Mean Rubric Score <i>(0-4; 0= undeveloped skill level, 4= mastery skill level)</i>
Demonstrate an understanding of the functionality and terminology associated with current information technology tools and resources.	3.14
Demonstrate the ability to conduct online research to locate and retrieve relevant information from credible sources.	3.13
Demonstrate the ability to use document processing software.	3.30
Demonstrate the ability to use presentation software to communicate information and ideas.	3.25
Demonstrate the ability to appropriately and responsibly utilize current communication technology methods.	3.37
Mean across all learning objectives:	3.24

*Note: Aggregate mean of reported mean for each section

Data Collection Cycle: Fall 2015 through Fall 2016

Number of sections: 99 sections

Median Class Size: 19 students

GOAL: SOCIAL AND CULTURAL AWARENESS

COMPETENCY: SOCIAL SYSTEMS (UNDERSTAND PROCESSES THAT INFLUENCE HUMAN VALUES, THOUGHTS, SOCIAL SYSTEMS, AND BEHAVIOR)

Learning Outcome: Students will examine the impact of social factors on personal beliefs, while considering alternatives to the dominant culture’s viewpoint.

Learning Objective	*Mean Rubric Score <i>(0-4; 0= undeveloped skill level, 4= mastery skill level)</i>
Recognize the processes by which individuals acquire social knowledge, attitudes, and beliefs.	3.11
Recognize major influences on social behavior and social systems.	3.19
Demonstrate knowledge of human diversity, including characteristics of a culture outside the student’s own.	3.09
Demonstrate knowledge of at least one systematic method for obtaining knowledge about social influences according to a recognized social science discipline.	3.17
Mean across all learning objectives:	3.15

*Note: Aggregate mean of reported mean for each section

Data Collection Cycle: Fall 2015 through Fall 2016

Number of sections: 43 sections

Median Class Size: 20 students

GOAL: SOCIAL AND CULTURAL AWARENESS

COMPETENCY: HUMAN EXPERIENCE (RECOGNIZE EXPRESSIONS OF THE HUMAN EXPERIENCE)

Learning Outcome: Students will explore, share, and reconstruct expressions of the human experience within the context of the past and present.

Learning Objective	*Mean Rubric Score <i>(0-4; 0= undeveloped skill level, 4= mastery skill level)</i>
Evaluate a particular form of creative human expression in the context of the appropriate academic discipline.	3.26
Analyze key events (including historical, social, economic, and/or personal) that influenced a particular form of creative human expression.	3.20
Analyze key events (including historical, social, economic, and/or personal) that demonstrate how a particular form of creative human expression influenced other works.	3.20
Create or reconstruct an expression of the human experience and share with others (if the class is performance based).	3.24
Mean across all learning objectives:	3.21

*Note: Aggregate mean of reported mean for each section

Data Collection Cycle: Winter 2016 through Winter 2017

Number of sections: 36 sections

Median Class Size: 18 students

GOAL: COMMUNICATION

COMPETENCY: WRITING (WRITE EFFECTIVELY)

Learning Outcome: Students will write Standard American English in a clear, correct, and organized manner for a variety of purposes and audiences.

Learning Objective	*Mean Rubric Score <i>(0-4; 0= undeveloped skill level, 4= mastery skill level)</i>
Write clear and concise sentences using Standard American English with appropriate syntax and mechanics.	2.87
Write paragraphs that demonstrate unity and coherence with appropriate details and examples that support a topic sentence and thesis sentence.	2.96
Develop written compositions using organizational patterns and rhetorical modes appropriate for the desired audience and purpose.	3.04
Create a composition that demonstrates the process of prewriting, revising, and editing expected in a college-level final draft.	3.05
Mean across all learning objectives:	2.98

*Note: Aggregate mean of reported mean for each section

Data Collection Cycle: Winter 2016 through Winter 2017

Number of sections: 37 sections

Median Class Size: 8 students

GOAL: CRITICAL THINKING

COMPETENCY: MATHEMATICS (USE MATHEMATICS TO EFFECTIVELY MODEL AND EVALUATE QUANTITATIVE RELATIONSHIPS)

Learning Outcome: Students will apply mathematical concepts and methods to understand, analyze, and communicate in quantitative terms.

Learning Objective	*Mean Rubric Score <i>(0-4; 0= undeveloped skill level, 4= mastery skill level)</i>
Use arithmetic and geometric concepts and representations to solve, estimate, calculate, and check answers to problems to determine the reasonableness of results.	3.22
Utilize linear, exponential, and other nonlinear models to evaluate the nature of relationships in real-world problems.	3.23
Organize, analyze, and interpret various representations of data, including functions, graphs, and tables.	3.07
Utilize a variety of problem-solving strategies to solve problems and communicate findings using appropriate mathematical language and symbolism.	3.09
Mean across all learning objectives:	3.15

*Note: Aggregate mean of reported mean for each section

Data Collection Cycle: Winter 2016 through Winter 2017

Number of sections: 54 sections

Median Class Size: 18 students

GOAL: CRITICAL THINKING

COMPETENCY: NATURAL SCIENCE (UNDERSTAND AND APPLY THE ELEMENTS OF SCIENTIFIC INQUIRY AND SCIENTIFIC PRINCIPLES IN A NATURAL SCIENCE COLLEGE LABORATORY COURSE SETTING)

Learning Outcome: Students will use the scientific methods to define a problem, utilize appropriate methods to solve the problem, and propose and evaluate a solution to the problem.

Learning Objective	*Mean Rubric Score <i>(0-4; 0= undeveloped skill level, 4= mastery skill level)</i>
Observe and describe natural phenomena and formulate hypotheses.	3.56
Plan and implement scientific experiments to test hypotheses.	3.34
Utilize scientific laboratory skills for data collection within a college laboratory setting.	3.36
Evaluate experimental data and propose solutions based on this data.	3.25
Evaluate the proposed implications of a solution.	3.13
Mean across all learning objectives:	3.33

*Note: Aggregate mean of reported mean for each section

Appendix A: Computer Literacy

General Education Assessment

Section Aggregate Sheet

Instructor # _____ **Course/Sec.** _____ **Semester/Year** _____

Total number of students assessed _____

Goal: **Communication**

Competency: Understand and apply current and appropriate technology tools and resources

Learning Outcome: Students will use computer technology to retrieve and communicate information

Learning Objectives: In order to achieve the learning outcome, the student will be able to

**Section Mean Average
by Objective**

Demonstrate an understanding of the functionality and terminology associated with current information technology tools and resources.

Demonstrate the ability to conduct online research to locate and retrieve relevant information from credible sources.

Demonstrate the ability to use document processing software.

Demonstrate the ability to use presentation software to communicate information and ideas.

Demonstrate the ability to appropriately and responsibly utilize current communications technology methods.

Section Mean Average of All Objectives

Assessment Rubric

GOAL TWO: COMMUNICATION

Competency: **Understand and apply current and appropriate technology tools and resources.**

Learning Outcome: Students will use computer technology to retrieve and communicate information.

Students will effectively exchange ideas and information using multiple methods of communication.

Student Name _____

Course _____ Section _____ Semester/Year _____

STUDENT LEARNING OBJECTIVE	MASTERY SKILL LEVEL 4	ACCOMPLISHED SKILL LEVEL 3	DEVELOPING SKILL LEVEL 2	UNDERDEVELOPED SKILL LEVEL 1	UNDEVELOPED SKILL LEVEL 0	SCORE
Demonstrate an understanding of the functionality and terminology associated with current information technology tools and resources.	• Excellent understanding of the functionality and terminology associated with information technology tools and resources	• Good understanding of the functionality and terminology associated with information technology tools and resources	• Average understanding of the functionality and terminology associated with information technology tools and resources	• Fair understanding of the functionality and terminology associated with information technology tools and resources	• Poor understanding of the functionality and terminology associated with information technology tools and resources	
Demonstrate the ability to conduct online research to locate and retrieve relevant information from credible sources.	• Excellent at conducting online research to locate and retrieve relevant information from credible sources.	• Good at conducting online research to locate and retrieve relevant information from credible sources.	• Average at conducting online research to locate and retrieve relevant information from credible sources.	• Fair at conducting online research to locate and retrieve relevant information from credible sources.	• Poor at conducting online research to locate and retrieve relevant information from credible sources.	
Demonstrate the ability to use document processing software.	• Excellent usage of document processing software.	• Good usage of document processing software.	• Average usage of document processing software.	• Fair usage of document processing software.	• Poor usage of document processing software.	
Demonstrate the ability to use presentation software to communicate information and ideas.	• Excellent usage of presentation software to communicate information and ideas.	• Good usage of presentation software to communicate information and ideas.	• Average usage of presentation software to communicate information and ideas.	• Fair usage of presentation software to communicate information and ideas.	• Poor usage of presentation software to communicate information and ideas.	
Demonstrate the ability to appropriately and responsibly utilize current communication technology methods.	• Excels at appropriately and responsibly utilizing current communication technology methods.	• Good at appropriately and responsibly utilizing current communication technology methods.	• Average at appropriately and responsibly utilizing current communication technology methods.	• Fair at appropriately and responsibly utilizing current communication technology methods.	• Poor at appropriately and responsibly utilizing current communication technology methods.	

Appendix B: Social Systems

**General Education Assessment
 Section Aggregate Sheet**

Instructor # _____ **Course/Sec.** _____ **Semester/Year** _____

Total number of students assessed _____

Goal: **Social and Cultural Awareness**

Competency: Understand the processes that influence human values, thoughts, social systems, and behavior.

Learning Outcome: Students will examine the impact of social factors on personal beliefs, while considering alternatives to the dominant cultures viewpoint.

Learning Objectives: In order to achieve the learning outcome, the student will be able to

**Section Mean Average
 by Objective**

Recognize the processes by which individuals acquire social knowledge, attitudes, and beliefs. _____

Recognize major influences on social behavior and social systems. _____

Demonstrate knowledge of human diversity, including characteristics of a culture outside the student's own. _____

Demonstrate knowledge of at least one systematic method for obtaining knowledge about social influences according to a recognized social science discipline. _____

Section Mean Average of All Objectives _____

Assessment Rubric

GOAL THREE: SOCIAL AND CULTURAL AWARENESS

Competency: Understand the processes that influence human values, thoughts, social systems, and behavior.

Learning Outcome: Student will examine the impact of social factors on personal beliefs, while considering alternatives to the dominant culture's viewpoint.

Students will understand the broad diversity of the human experience.

Student Name _____

Course _____ Section _____ Semester/Year _____

STUDENT LEARNING OBJECTIVE	MASTERY SKILL LEVEL 4	ACCOMPLISHED SKILL LEVEL 3	DEVELOPING SKILL LEVEL 2	UNDERDEVELOPED SKILL LEVEL 1	UNDEVELOPED SKILL LEVEL 0	SCORE
Recognize the processes by which individuals acquire social knowledge, attitudes, and beliefs.	• Student can recognize several processes by which individuals acquire social knowledge attitudes and beliefs.	• Student can recognize more than one process by which individuals acquire social knowledge attitudes and beliefs.	• Student can recognize at least one process by which individuals acquire social knowledge attitudes and beliefs.	• Student can sometimes recognize at least one process by which individuals acquire social knowledge attitudes and beliefs.	• Student is not able to recognize any processes by which individuals acquire social knowledge attitudes and beliefs.	
Recognize major influences on social behavior and social systems	• Student can recognize several influences on social behavior and social systems.	• Student can recognize more than one influence on social behavior and social systems.	• Student can recognize at least one influence on social behavior and social systems.	• Student can sometimes recognize at least one influence on social behavior and social systems.	• Student is not able to recognize any influences on social behavior and social systems.	
Demonstrate knowledge of human diversity, including characteristics of a culture outside the student's own.	• Student can recognize human diversity and is able to identify several characteristics of a culture outside of his or her own.	• Student can recognize human diversity and is able to identify more than one characteristic of a culture outside of his or her own.	• Student can recognize human diversity and is able to identify at least one characteristic of a culture outside of his or her own.	• Student can sometimes recognize human diversity but is unable to identify characteristics of a culture outside of his or her own.	• Student is not able to recognize human diversity and is unable to identify characteristics of a culture outside of his or her own.	
Demonstrate knowledge of at least one systematic method for obtaining knowledge about social influences according to a recognized social science discipline.	• Student can identify the steps of a systematic social science method used for obtaining knowledge about social factors and identify several components of the method in real examples.	• Student can identify the steps of a systematic social science method used for obtaining knowledge about social factors and identify more than one component of the method in real examples.	• Student can identify some steps of a systematic social science method used for obtaining knowledge about social factors and identify at least one component of the method in real examples.	• Student can identify some steps of a systematic social science method used for obtaining knowledge about social factors. • Student is unable to identify components of the method in real examples.	• Student is unable to identify steps of a systematic social science method used for obtaining knowledge about social factors. • Student is unable to identify components of the method in real examples.	

Appendix C: Human Experience

**General Education Assessment
 Section Aggregate Sheet**

Instructor # _____ **Course/Sec.** _____ **Semester/Year** _____

Total number of students assessed _____

Goal: **Social and Cultural Awareness**

Competency: Recognize expressions of the human experience

Learning Outcome: Students will explore, share, and reconstruct expressions of the human experience within the context of the past and present.

Learning Objectives: In order to achieve the learning outcome, the student will be able to

**Section Mean Average
 by Objective**

Evaluate a particular form of creative human expression in the context of the appropriate academic discipline. _____

Analyze key events (including historical, social, economic, and/or personal) that influenced a particular form of creative human expression. _____

Analyze key events (including historical, social, economic, and/or personal) that demonstrate how a particular form of creative human expression influenced other works. _____

Create or reconstruct an expression of the human experience and share with others (*if the class is performance based*). _____

Section Mean Average of All Objectives _____

Assessment Rubric

GOAL THREE: SOCIAL AND CULTURAL AWARENESS

Competency: **Recognize expressions of the human experience.**

Learning Outcome: Student will explore, share, and reconstruct expressions of the human experience within the context of the past and present.

Students will understand the broad diversity of the human experience.

Student Name _____

Course _____ Section _____ Semester/Year _____

STUDENT LEARNING OBJECTIVE	MASTERY SKILL LEVEL 4	ACCOMPLISHED SKILL LEVEL 3	DEVELOPING SKILL LEVEL 2	UNDERDEVELOPED SKILL LEVEL 1	UNDEVELOPED SKILL LEVEL 0	SCORE
Evaluate a particular form of creative human expression in the context of the appropriate academic discipline.	<ul style="list-style-type: none"> Clearly and consistently demonstrates understanding of "vocabulary" of discipline Clearly, consistently, and appropriately evaluates creative human expressions within context of discipline 	<ul style="list-style-type: none"> Demonstrates general understanding of "vocabulary" of discipline With guidance, demonstrates ability to evaluate creative human expressions within context of discipline 	<ul style="list-style-type: none"> Demonstrates inconsistent understanding of "vocabulary" of discipline Even with guidance, cannot clearly, consistently, and appropriately evaluate creative human expressions within context of discipline 	<ul style="list-style-type: none"> Even with guidance has difficulty understanding "vocabulary" of discipline Even with guidance has difficulty evaluating creative human expressions within context of discipline 	<ul style="list-style-type: none"> Even with guidance, is unable to understand "vocabulary" of discipline Even with guidance is unable to evaluate creative human expressions within context of discipline 	
Analyze key events (including historical, social, economic, and/or personal) that influenced a particular form of creative human expression.	<ul style="list-style-type: none"> Demonstrates clear and consistent understanding of factors that may have influenced a particular genre, movement, or work Is able to clearly and consistently place topic under consideration in its proper historical, social, economic, and/or personal context Is able to clearly demonstrate understanding of similarities and differences among various creative expressions within a particular context 	<ul style="list-style-type: none"> Demonstrates general understanding of factors that may have influenced a particular genre, movement, or work Is able to place topic under consideration in its proper historical, social, economic, and/or personal context with guidance Is able to demonstrate an understanding of similarities and differences among various creative expressions within a particular context 	<ul style="list-style-type: none"> Demonstrates inconsistent understanding of factors that may have influenced a particular genre, movement, or work, even with guidance Is not clearly and consistently able to place topic under consideration in its proper historical, social, economic, and/or personal context even with guidance Is not clearly and consistently able to demonstrate an understanding of similarities and differences among various creative expressions within a particular context 	<ul style="list-style-type: none"> Even with guidance, has difficulty understanding factors that may have influenced a particular genre, movement, or work Has difficulty placing topic under consideration in its proper historical, social, economic, and/or personal context even with guidance Has difficulty demonstrating understanding of similarities and differences among various creative expressions within a particular context 	<ul style="list-style-type: none"> Even with guidance, is unable to understand factors that may have influenced a particular genre, movement, or work Is unable to place topic under consideration in its proper historical, social, economic, and/or personal context even with guidance Is unable to demonstrate understanding of similarities and differences among various creative expressions within a particular context 	
Analyze key events (including historical, social, economic, and/or personal) that demonstrate how a particular form of creative human expression influenced other works.	<ul style="list-style-type: none"> Demonstrates clear and consistent understanding of how particular genre, movement, or piece influenced other works Is able to clearly and consistently place topic under consideration in its proper historical, social, economic, and/or personal context Is able to clearly demonstrate understanding of similarities and differences among various creative expressions within a variety of contexts 	<ul style="list-style-type: none"> Demonstrates general understanding of how particular genre, movement, or piece influenced other works With guidance is able to place topic under consideration in its proper historical, social, economic, and/or personal context With guidance is able to demonstrate understanding of similarities and differences among various creative expressions within a variety of contexts 	<ul style="list-style-type: none"> Demonstrates inconsistent understanding of how particular genre, movement, or piece influenced other works Even with guidance is not clearly and consistently able to place topic under consideration in its proper historical, social, economic, and/or personal context Even with guidance is not clearly and consistently able to demonstrate understanding of similarities and differences among various creative expressions within a variety of contexts 	<ul style="list-style-type: none"> Even with guidance has difficulty understanding how particular genre, movement, or piece influenced other works Even with guidance has difficulty placing topic under consideration in its proper historical, social, economic, and/or personal context Even with guidance has difficulty demonstrating understanding of similarities and differences among various creative expressions within a variety of contexts 	<ul style="list-style-type: none"> Even with guidance, is unable to understand how particular genre, movement, or piece influenced other works Even with guidance is unable to place the topic under consideration in its proper historical, social, economic, and/or personal context Even with guidance is unable to demonstrate understanding of similarities and differences among various creative expressions within a variety of contexts 	
Create or reconstruct an expression of the human experience and share it with others (if the course is performance based).	<ul style="list-style-type: none"> Performance clearly, consistently, and appropriately meets all assigned criteria Performance demonstrates mastery of the form 	<ul style="list-style-type: none"> Performance meets most of assigned criteria Performance demonstrates a strong understanding of the form 	<ul style="list-style-type: none"> Performance is inconsistent in meeting assigned criteria Performance demonstrates only a basic understanding of the form 	<ul style="list-style-type: none"> Performance does not meet assigned criteria Performance demonstrates a less than a basic understanding of the form 	<ul style="list-style-type: none"> Performance demonstrates lack of understanding of assigned criteria Performance is unacceptable 	

Appendix D: Writing

**General Education Assessment
Section Aggregate Sheet**

Instructor # _____ **Course/Sec.** _____ **Semester/Year** _____

Total number of students assessed _____

Goal: **Communication**

Competency: Write effectively

Learning Outcome: Students will write Standard American English in a clear, correct, and organized manner for a variety of purposes and audiences.

Learning Objectives: In order to achieve the learning outcome, the student will be able to

**Section Mean Average
by Objective**

Write clear and concise sentences using Standard American English with appropriate syntax and mechanics.

Write paragraphs that demonstrate unity and coherence with appropriate details and examples that support a topic sentence and thesis sentence.

Develop written compositions using organizational patterns and rhetorical modes appropriate for the desired audience and purpose.

Create a composition that demonstrates the process of prewriting, revising, and editing expected in a college-level final draft.

Section Mean Average of All Objectives

Assessment Rubric

GOAL TWO: COMMUNICATION

Competency: **Write effectively.**

Learning Outcome: Students will write Standard American English in a clear, correct, and organized manner for a variety of purposes and audiences.

Students will effectively exchange ideas and information using multiple methods of communication.

Student Name _____
 Course _____ Section _____ Semester/Year _____

STUDENT LEARNING OBJECTIVE	MASTERY SKILL LEVEL 4	ACCOMPLISHED SKILL LEVEL 3	DEVELOPING SKILL LEVEL 2	UNDERDEVELOPED SKILL LEVEL 1	UNDEVELOPED SKILL LEVEL 0	SCORE
Write clear and concise sentences using standard American English with appropriate syntax and mechanics.	<ul style="list-style-type: none"> Sentences are consistently clear and concise with varied and appropriate word choices. Sentences are varied in length and style. There are few or no errors of syntax, grammar, spelling, or punctuation. 	<ul style="list-style-type: none"> Sentences are usually clear and concise. Word choices are usually varied and appropriate, although there is some repetition. Sentences are usually varied in length and style. There are a few errors of syntax, grammar, spelling, or punctuation. 	<ul style="list-style-type: none"> Sentences are sometimes clear and concise. Word choices are sometimes appropriate or precise. Sentences are sometimes varied in length and style. Errors of syntax, grammar, spelling, or punctuation are common. 	<ul style="list-style-type: none"> Sentences are rarely clear and concise. Word choices are often inappropriate or vague. Sentences are rarely varied in length and style. Errors of syntax, grammar, spelling, or punctuation are frequent. 	<ul style="list-style-type: none"> Sentences are not clear and concise. There are run-ons or fragments. Parts of speech do not agree. Sentences are not varied in length and style. Word choices are inappropriate or vague. There are numerous errors of syntax, grammar, spelling, or punctuation. 	
Write paragraphs that demonstrate unity and coherence with appropriate details and examples that support a topic sentence and thesis statement.	<ul style="list-style-type: none"> Paragraphs consistently have a clear focus. Specific and concrete details support each topic sentence. Sentences flow logically or sequentially with smooth transitions. 	<ul style="list-style-type: none"> Paragraphs usually have a clear focus. Specific and concrete details usually support each topic sentence. Most sentences flow logically or sequentially with smooth transitions. 	<ul style="list-style-type: none"> Paragraphs sometimes have a clear focus. Some specific and concrete details support topic sentences. Sentences sometimes flow logically or sequentially with smooth transitions. 	<ul style="list-style-type: none"> Paragraphs rarely have a clear focus. There is a lack of specific and concrete details to support each topic sentence. Sentences rarely flow logically or sequentially with smooth transitions. 	<ul style="list-style-type: none"> Paragraphs do not have a clear focus. There are not specific and concrete details to support each topic sentence. Sentences do not flow logically or sequentially with smooth transitions. 	
Develop written compositions using organizational patterns and rhetorical modes appropriate for the desired audience and purpose.	<ul style="list-style-type: none"> Compositions are consistently organized around a well-developed theme. Paragraphs consistently transition smoothly. Use of rhetorical modes consistently demonstrates an understanding of the appropriate audience and purpose. 	<ul style="list-style-type: none"> Compositions are usually organized around a well-developed theme. Paragraphs usually transition smoothly. Use of rhetorical modes usually demonstrates an understanding of the appropriate audience and purpose. 	<ul style="list-style-type: none"> Compositions are sometimes organized around a well-developed theme. Paragraphs sometimes transition smoothly. Use of rhetorical modes sometimes demonstrates an understanding of the appropriate audience and purpose. 	<ul style="list-style-type: none"> Compositions are rarely organized around a well-developed theme. Paragraphs rarely transition smoothly. Use of rhetorical modes rarely demonstrates an understanding of the appropriate audience and purpose. 	<ul style="list-style-type: none"> Compositions are not organized around a well-developed theme. Paragraphs do not transition smoothly. Use of rhetorical modes fails to demonstrate an understanding of the appropriate audience and purpose. 	
Create a composition that demonstrates the process of prewriting, revising, and editing expected in a college-level final draft.	<ul style="list-style-type: none"> Composition demonstrates the effective use of prewriting, revising, and editing to complete a final draft. 	<ul style="list-style-type: none"> Composition mostly demonstrates the effective use of prewriting, revising, and editing to complete a final draft. 	<ul style="list-style-type: none"> Composition partially demonstrates the effective use of prewriting, revising, and editing to complete a final draft. 	<ul style="list-style-type: none"> Composition minimally demonstrates the effective use of prewriting, revising, and editing to complete a final draft. 	<ul style="list-style-type: none"> Composition does not demonstrate the effective use of prewriting, revising, and editing to complete a final draft. 	

Appendix E: Mathematics

**General Education Assessment
 Section Aggregate Sheet**

Instructor # _____ **Course/Sec.** _____ **Semester/Year** _____

Total number of students assessed _____

Goal One: Critical Thinking

Competency: Use mathematics to effectively model and evaluate quantitative relationships

Learning Outcome: Students will apply mathematical concepts and methods to understand, analyze, and communicate in quantitative terms.

Learning Objectives: In order to achieve the learning outcome, the student will be able to

**Section Mean Average
 by Objective**

Use arithmetic and geometric concepts and representations to solve, estimate, calculate, and check answers to problems to determine the reasonableness of results. _____

Utilize linear, exponential, and other nonlinear models to evaluate the nature of relationships in real-world problems. _____

Organize, analyze, and interpret various representations of data, including functions, graphs, and tables. _____

Utilize a variety of problem-solving strategies to solve problems and communicate findings using appropriate mathematical language and symbolism. _____

Section Mean Average of All Objectives _____

Assessment Rubric

GOAL ONE: CRITICAL THINKING

Competency: Use mathematics to effectively model and evaluate quantitative relationships.

Learning Outcome: Students will apply mathematical concepts and methods to understand, analyze, and communicate in quantitative terms.

Students will think critically using a purposeful, reasoned, objective, and goal-oriented process in a variety of contexts.

Student Name _____
 Course _____ Section _____ Semester/Year _____

STUDENT LEARNING OBJECTIVE	MASTERY SKILL LEVEL 4	ACCOMPLISHED SKILL LEVEL 3	DEVELOPING SKILL LEVEL 2	UNDERDEVELOPED SKILL LEVEL 1	UNDEVELOPED SKILL LEVEL 0	SCORE
Use arithmetic and geometric concepts and representations to solve, estimate, calculate, and check answers to problems to determine the reasonableness of results.	• Consistently demonstrates the ability to use arithmetic and geometric concepts to solve problems and check the reasonableness of solutions.	• Usually demonstrates the ability to use arithmetic and geometric concepts to solve problems and check the reasonableness of solutions.	• Inconsistently demonstrates the ability to use arithmetic and geometric concepts to solve problems and check the reasonableness of solutions.	• Rarely demonstrates the ability to use arithmetic and geometric concepts to solve problems and check the reasonableness of solutions.	• Unable to use arithmetic and geometric concepts to solve problems and check the reasonableness of solutions.	
Utilize linear, exponential and other nonlinear models to evaluate the nature of relationships in real-world problems.	• Consistently demonstrates the ability to differentiate between the need for a linear, exponential, or other nonlinear model.	• Usually demonstrates the ability to differentiate between the need for a linear, exponential, or other nonlinear model.	• Inconsistently demonstrates the ability to differentiate between the need for a linear, exponential, or other nonlinear model.	• Rarely demonstrates the ability to differentiate between the need for a linear, exponential, or other nonlinear model.	• Unable to differentiate between the need for a linear, exponential, or other nonlinear model.	
Organize, analyze, and interpret various representations of data, including functions, graphs, and tables.	• Consistently demonstrates the ability to organize, analyze, and interpret various representations of data.	• Usually demonstrates the ability to organize, analyze, and interpret various representations of data.	• Inconsistently demonstrates the ability to organize, analyze, and interpret various representations of data.	• Rarely demonstrates the ability to organize, analyze, and interpret various representations of data.	• Unable to organize, analyze, and interpret various representations of data.	
Utilize a variety of problem-solving strategies to solve problems and communicate findings using appropriate mathematical language and symbolism.	• Consistently demonstrates the ability to apply appropriate mathematical language and symbolism to solve problems.	• Usually demonstrates the ability to apply appropriate mathematical language and symbolism to solve problems.	• Inconsistently demonstrates the ability to apply appropriate mathematical language and symbolism to solve problems.	• Rarely demonstrates the ability to apply appropriate mathematical language and symbolism to solve problems.	• Unable to apply appropriate mathematical language and symbolism to solve problems.	

Appendix F: Natural Science

**General Education Assessment
 Section Aggregate Sheet**

Instructor # _____ **Course/Sec.** _____ **Semester/Year** _____

Total number of students assessed _____

Goal One:

Critical Thinking

Competency:

Understand and apply the elements of scientific inquiry and scientific principles in a natural science college laboratory course setting

Learning Outcome:

Student will use the scientific method to define a problem, utilize appropriate methods to solve the problem, and propose and evaluate a solution to the problem.

Learning Objectives:

In order to achieve the learning outcome, the student will be able to

**Section Mean Average
 by Objective**

Observe and describe natural phenomena and formulate hypotheses.

Plan and implement scientific experiments to test hypotheses.

Utilize scientific laboratory skills for data collection within a college laboratory setting.

Evaluate experimental data and propose solutions based on this data.

Evaluate the proposed implications of a solution.

Section Mean Average of All Objectives

Assessment Rubric

GOAL ONE: CRITICAL THINKING

Competency: Understand and apply elements of scientific inquiry and scientific principles in a natural science laboratory course setting.

Learning Outcome: Students will use the scientific method to define a problem, utilize appropriate methods to solve the problem, and propose and evaluate a solution to the problem.

Students will think critically using a purposeful, reasoned, objective, and goal-oriented process in a variety of contexts.

Student Name _____

Course _____ Section _____ Semester/Year _____

STUDENT LEARNING OBJECTIVE	MASTERY SKILL LEVEL 4	ACCOMPLISHED SKILL LEVEL 3	DEVELOPING SKILL LEVEL 2	UNDERDEVELOPED SKILL LEVEL 1	UNDEVELOPED SKILL LEVEL 0	SCORE
Observe and describe natural phenomena and formulate hypotheses.	<ul style="list-style-type: none"> Consistently able to distinguish between natural and supernatural phenomena Consistently uses observations to develop hypotheses. 	<ul style="list-style-type: none"> Usually demonstrates ability to distinguish between natural and supernatural phenomena Usually uses observations to develop hypotheses. 	<ul style="list-style-type: none"> Sometimes able to distinguish between natural and supernatural phenomena Sometimes uses observations to develop hypotheses. 	<ul style="list-style-type: none"> Rarely demonstrates ability to distinguish between natural and supernatural phenomena Even with guidance has difficulty using observations to develop hypotheses. 	<ul style="list-style-type: none"> Unable to distinguish between natural and supernatural phenomena Even with guidance is unable to use observations to develop hypotheses. 	
Plan and implement scientific experiments to test hypotheses.	<ul style="list-style-type: none"> Consistently demonstrates ability to plan scientific experiments Consistently demonstrates ability to perform scientific experiments. 	<ul style="list-style-type: none"> Usually demonstrates ability to plan scientific experiments Usually demonstrates ability to perform scientific experiments. 	<ul style="list-style-type: none"> Sometimes demonstrates ability to plan scientific experiments Sometimes demonstrates ability to perform scientific experiments. 	<ul style="list-style-type: none"> Rarely demonstrates ability to plan scientific experiments Rarely demonstrates ability to perform scientific experiments. 	<ul style="list-style-type: none"> Does not demonstrate any ability to plan scientific experiments Does not demonstrate ability to perform scientific experiments even with constant guidance. 	
Utilize scientific laboratory skills for data collection within a college laboratory setting.	<ul style="list-style-type: none"> Consistently demonstrates the proper use of laboratory equipment and safety procedures Consistently demonstrates the ability to collect, collate, and record data. 	<ul style="list-style-type: none"> Usually demonstrates the proper use of laboratory equipment and safety procedures Usually demonstrates the ability to collect, collate, and record data. 	<ul style="list-style-type: none"> Sometimes demonstrates the proper use of laboratory equipment and safety procedures Sometimes demonstrates the ability to collect, collate, and record data. 	<ul style="list-style-type: none"> Rarely demonstrates the proper use of laboratory equipment and safety procedures Rarely demonstrates the ability to collect, collate, and record data. 	<ul style="list-style-type: none"> Does not demonstrate the proper use of laboratory equipment and safety procedures Does not demonstrate the ability to collect, collate, and record data. 	
Evaluate experimental data and propose solutions based on this data.	<ul style="list-style-type: none"> Consistently able to demonstrate the ability to analyze and interpret experimental data Consistently able to reassess the impact of the experimental data on the original hypothesis Consistently able to propose appropriate conclusions based on the interpretation of experimental data. 	<ul style="list-style-type: none"> Usually demonstrate the ability to analyze and interpret experimental data Usually able to reassess the impact of the experimental data on the original hypothesis Usually able to propose appropriate conclusions based on the interpretation of experimental data. 	<ul style="list-style-type: none"> Sometimes able to demonstrate the ability to analyze and interpret experimental data Sometimes able to reassess the impact of the experimental data on the original hypothesis Sometimes able to propose appropriate conclusions based on the interpretation of experimental data. 	<ul style="list-style-type: none"> Rarely demonstrate the ability to analyze and interpret experimental data Rarely able to reassess the impact of the experimental data on the original hypothesis Rarely able to propose appropriate conclusions based on the interpretation of experimental data. 	<ul style="list-style-type: none"> Unable to demonstrate the ability to analyze and interpret experimental data Unable to reassess the impact of the experimental data on the original hypothesis Does not propose appropriate conclusions based on the interpretation of experimental data. 	
Evaluate the proposed implications of a solution.	<ul style="list-style-type: none"> Consistently able to recognize the need for additional testing Consistently able to relate experimental conclusions to the natural world. 	<ul style="list-style-type: none"> Usually able to recognize the need for additional testing Usually able to relate experimental conclusions to the natural world. 	<ul style="list-style-type: none"> Sometimes able to recognize the need for additional testing Sometimes able to relate experimental conclusions to the natural world. 	<ul style="list-style-type: none"> Rarely able to recognize the need for additional testing Rarely able to relate experimental conclusions to the natural world. 	<ul style="list-style-type: none"> Unable to recognize the need for additional testing Unable to relate experimental conclusions to the natural world. 	