

GBC Class/Course Assessment Report

MATH 20 Support course for Math 120E

Section Number(s): 1003

Instructor: Ping Wang

Number of Students in the class: 30

Academic Year: 2022

Semester: Spring

Course and general education outcomes are counted as achieved if 62% or more of students answered the problems associated with the outcome correctly. As needed, please attach supporting documents and/or a narrative description of the assessment activities. All the learning outcomes must be completed otherwise the assessment is considered as incomplete.

Class/Course Outcomes	Assessment Measures	Course Outcome Assessment Results	Outcome Results
In the boxes below, summarize the outcomes assessed in your class or course during the last year. If this is a GenEd class, include the appropriate GenEd objectives.	In the boxes below, list the proctored assignments and which problems on those assignments you used to assess each outcome.	In the boxes below, give the percentage of students who answered the problems correctly and indicate if the course outcome was achieved.	In the boxes below, please reflect on this outcome's results and summarize how you plan to use the results to improve student learning
Outcome #1: Correctly execute arithmetic operations using rational and real numbers.	Proctored assignment: Final Exam Problem numbers: 8.3.3 8.3.11 10.2.23	Results: Average percentage: 76.8% Criterion Met: Yes/No	1. Results Analysis: The majority students can execute arithmetic operations. 2. Action Plan: n/a
Outcome #2: Evaluate and simplify expressions involving exponents.	Proctored assignment: Final Exam Problem numbers: 10.4.13 10.4.23 10.5.9	Results: Average percentage: 65.2% Criterion Met: Yes/No	1. Results Analysis: Students feel challenging while working on expressions involving exponents. 2. Action Plan: More questions relevant to exponents should be possibly considered to assign in assignments and quizzed to enhance students' practice.

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<p>Outcome #3: Simplify Algebraic expressions.</p>	<p>Proctored assignment: Final Exam</p> <p>Problem numbers: 12.2.3 12.2.13 12.4.11 12.3.5</p>	<p>Results: Average percentage: 84.7%</p> <p>Criterion Met: Yes/No</p>	<p>1. Results Analysis: The majority students can execute arithmetic operations.</p> <p>2. Action Plan: n/a</p>
<p>Outcome #4: Solve linear equations in one variable.</p>	<p>Proctored assignment: Final Exam</p> <p>Problem numbers: 9.1.9 9.1.21 9.2.11 9.3.49</p>	<p>Results: Average percentage: 90.2%</p> <p>Criterion Met: Yes/No</p>	<p>1. Results Analysis: The majority students can execute arithmetic operations.</p> <p>2. Action Plan: n/a</p>
<p>Outcome #5: Solve rational equations</p>	<p>Proctored assignment: Final Exam</p> <p>Problem numbers: 10.6.37 10.2.23</p>	<p>Results: Average percentage: 76.1%</p> <p>Criterion Met: Yes/No</p>	<p>1. Results Analysis: The majority students can execute arithmetic operations.</p> <p>2. Action Plan: n/a</p>
<p>Outcome #6 Implement effective study skills to succeed in college level mathematics courses.</p>	<p>Proctored assignment: Final Exam</p> <p>Problem numbers: All questions used in the proctored final exam for Math120E.</p>	<p>Results: Average percentage: 78.6%</p> <p>Criterion Met: Yes/No</p>	<p>1. Results Analysis: Criterion are met for all of previous 5 outcomes. Also, on average, more than 78% of students got questions correctly which shows that students can implement effective study skills to succeed in college level mathematics courses.</p> <p>2. Action Plan: n/a</p>

Notes:

GBC Class/Course Assessment Report

MATH 20 Support course for Math 120E

Section Number(s): 1004

Instructor: Ping Wang

Number of Students in the class: 22

Academic Year: 2021

Semester: Fall

Course and general education outcomes are counted as achieved if 62% or more of students answered the problems associated with the outcome correctly. As needed, please attach supporting documents and/or a narrative description of the assessment activities. All the learning outcomes must be completed otherwise the assessment is considered as incomplete.

Class/Course Outcomes	Assessment Measures	Course Outcome Assessment Results	Outcome Results
<p>In the boxes below, summarize the outcomes assessed in your class or course during the last year. If this is a GenEd class, include the appropriate GenEd objectives.</p>	<p>In the boxes below, list the proctored assignments and which problems on those assignments you used to assess each outcome.</p>	<p>In the boxes below, give the percentage of students who answered the problems correctly and indicate if the course outcome was achieved.</p>	<p>In the boxes below, please reflect on this outcome's results and summarize how you plan to use the results to improve student learning</p>
<p>Outcome #1: Correctly execute arithmetic operations using rational and real numbers.</p>	<p>Proctored assignment: Final Exam</p> <p>Problem numbers: 8.3.3 8.3.11 10.2.23</p>	<p>Results: Average percentage: 77.8%</p> <p>Criterion Met: Yes/No</p>	<p>1. Results Analysis: Most of students are able to execute arithmetic operations.</p> <p>2. Action Plan: n/a</p>
<p>Outcome #2: Evaluate and simplify expressions involving exponents.</p>	<p>Proctored assignment: Final Exam</p> <p>Problem numbers: 10.4.13 10.4.23 10.5.9</p>	<p>Results: Average percentage: 57.4%</p> <p>Criterion Met: Yes/No</p>	<p>1. Results Analysis: Students feel challenging while working on expressions involving exponents.</p> <p>2. Action Plan: More questions relevant to exponents should be considered to assign in assignments and quizzed to enhance students' practice.</p>

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<p>Outcome #3: Simplify Algebraic expressions.</p>	<p>Proctored assignment: Final Exam</p> <p>Problem numbers: 12.2.3 12.2.13 12.4.11 12.3.5</p>	<p>Results: Average percentage: 84.7%</p> <p>Criterion Met: Yes/No</p>	<p>1. Results Analysis: Many students are able to simplify algebraic expressions.</p> <p>2. Action Plan: n/a</p>
<p>Outcome #4: Solve linear equations in one variable.</p>	<p>Proctored assignment: Final Exam</p> <p>Problem numbers: 9.1.9 9.1.21 9.2.11 9.3.49</p>	<p>Results: Average percentage: 87.5%</p> <p>Criterion Met: Yes/No</p>	<p>1. Results Analysis: Solving linear equations in one variable seems a skill that most of students have mastered.</p> <p>2. Action Plan: n/a</p>
<p>Outcome #5: Solve rational equations</p>	<p>Proctored assignment: Final Exam</p> <p>Problem numbers: 10.6.37 10.2.23</p>	<p>Results: Average percentage: 61.1%</p> <p>Criterion Met: Yes/No</p>	<p>1. Results Analysis: Solving rational equations are needed for more practice.</p> <p>2. Action Plan: More questions relevant to rational equations should be considered to assign in assignments and quizzed to enhance students' practice.</p>
<p>Outcome #6 Implement effective study skills to succeed in college level mathematics courses.</p>	<p>Proctored assignment: Final Exam</p> <p>Problem numbers: All questions used in the proctored final exam for Math120E.</p>	<p>Results: Average percentage: 74%</p> <p>Criterion Met: Yes/No</p>	<p>1. Results Analysis: On average, more than 74% of students got questions correctly which shows that students are able to implement effective study skills to succeed in college level mathematics courses.</p> <p>2. Action Plan: n/a</p>

Notes:

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MATH 120E Fundamentals of College Mathematics
 Section Number(s): 1003
 Instructor: Ping Wang
 Number of Students: 30

Academic Year: 2022
 Semester: Spring

Course and general education outcomes are counted as achieved if 62% or more of students answered the problems associated with the outcome correctly. As needed, please attach supporting documents and/or a narrative description of the assessment activities. All the learning outcomes must be assessed otherwise the assessment is considered as incomplete.

General Education Objectives	Class/Course Outcomes	Assessment Measures	Course Outcome Assessment Results	General Education Outcome Assessment Results	Outcome Results Analysis
	In the boxes below, summarize the outcomes assessed in your class or course during the last year. If this is a GenEd class, include the appropriate GenEd objectives.	In the boxes below, list the proctored assignments and which problems on those assignments you used to assess each outcome.	In the boxes below, give the percentage of students who answered the problems correctly and indicate if the course outcome was achieved.	In the boxes below, give the average of the percentages of students who met course learning outcomes and indicate if the general education outcome was achieved.	In the boxes below, please reflect on this outcome's results and summarize how you plan to use the results to improve student learning.
Demonstrate knowledge Of mathematical notation and concepts	Outcome #1: Solve problems using the basic rules of probability.	Proctored assignment: Final Exam Problem numbers: 11.4.11 11.4.57 11.6.13 11.7.13 11.7.55	Results: On average, 15 out of 23 students answered correctly. (65.2%) Criterion Met: Yes/No	Average percentage: 56.85% Criterion Met: Yes/ No	1. Results Analysis: Set theory and applications is a weak area for many students 2. Action Plan: More homework questions relevant to these topics should be considered to assign to students for more

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	<p>Outcome #2:</p> <p>Solve problems using basic set theory.</p>	<p>Proctored assignment: Midterm Exam 1</p> <p>Problem numbers: 2.3.69 2.3.135 2.4.53 2.5.23 2.5.34</p>	<p>Results: On average, 12.6 out of 26 students answered correctly. (48.5%)</p> <p>Criterion Met: Yes/No</p>		<p>practice.</p>
<p>Apply mathematical concepts and operations in proper written or graphical format</p>	<p>Outcome #3:</p> <p>Follow appropriate mathematical format and use proper mathematical notation in solving problems.</p>	<p>Proctored assignment: Final Exam</p> <p>Problem numbers: 10.2.23 9.3.49 10.4.23</p>	<p>Results: On average, 15 out of 23 students answered correctly. (65.2%)</p> <p>Criterion Met: Yes/No</p>	<p>Average percentage: 65.2%</p> <p>Criterion Met: Yes/No</p>	<p>1. Results Analysis: It seems that students are doing good to follow appropriate mathematical format and notation to solve problems.</p> <p>2. Action Plan:</p>
	<p>Outcome #4:</p> <p>Use mathematical formulas to evaluate problems involving financial data.</p>	<p>Proctored assignment: Final Exam</p> <p>Problem numbers: 8.3.3 8.3.11 8.5.39</p>	<p>Results: On average, 19 out of 23 students answered correctly. (82.6%)</p> <p>Criterion Met: Yes/No</p>	<p>Average percentage: 73.48%</p> <p>Criterion Met: Yes/No</p>	<p>1. Results Analysis: Applications on geometric figures and right angels and symbolic logic are weak areas</p>

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<p>Apply relevant mathematical skills in solving real-world problems</p> <p>Continued: Apply relevant mathematical skills in solving real-world problems</p>	<p>Outcome #5: Solve problems using dimensional analysis</p>	<p>Proctored assignment: Final Exam</p> <p>Problem numbers: 9.1.9 9.1.21 9.2.11 9.3.49</p>	<p>Results: On average, 18 out of 23 students answered correctly. (78.3%)</p> <p>Criterion Met: Yes/No</p>	<p>2. Action Plan: a) More questions relevant to those topics should be considered to assign in homework and quizzes for more practice.</p> <p>b) Some group studies and discussions could be conducted to enhance students' understanding about those topics.</p>
	<p>Outcome #6: Identify and analyze statistical data.</p>	<p>Proctored assignment: Final Exam</p> <p>Problem numbers: 12.2.3 12.2.13 12.4.11 12.3.5</p>	<p>Results: On average, 20.75 out of 23 students answered correctly. (90.2%)</p> <p>Criterion Met: Yes/No</p>	
	<p>Outcome #7: Use formal and symbolic logic to analyze arguments and draw valid conclusions.</p>	<p>Proctored assignment: Midterm Exam 1</p> <p>Problem numbers: 3.7.5 3.7.25 3.5.15 3.2.7</p>	<p>Results: On average, 11.5 out of 26 students answered correctly. (48.5%)</p> <p>Criterion Met: Yes/No</p>	
	<p>Outcome #8: Use trigonometry to solve problems involving right triangles.</p>	<p>Proctored assignment: Final Exam</p> <p>Problem numbers: 10.6.37 10.2.23</p>	<p>Results: On average, 17.5 out of 23 students answered correctly. (76.1%)</p> <p>Criterion Met: Yes/No</p>	

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	<p>Outcome #9:</p> <p>Calculate perimeter, area, surface area, and volume of various geometric objects.</p>	<p>Proctored assignment: Final Exam</p> <p>Problem numbers: 10.4.13 10.4.23 10.5.9</p>	<p>Results: On average, 15 out of 23 students answered correctly. (65.2%)</p> <p>Criterion Met: Yes/No</p>		
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Notes:

I have reviewed this report:

Department Chair

Date _____

Dean

Date _____

Vice President of Academic Affairs and Student Services

Date _____

GBC Class/Course Assessment Report

MATH 120 Fundamentals of College Mathematics
Section Number(s): 1004
Instructor: Ping Wang
Number of Students: 23

Academic Year: 2021
Semester: Fall

Course and general education outcomes are counted as achieved if 62% or more of students answered the problems associated with the outcome correctly. As needed, please attach supporting documents and/or a narrative description of the assessment activities. All the learning outcomes must be assessed otherwise the assessment is considered as incomplete.

General Education Objectives	Class/Course Outcomes	Assessment Measures	Course Outcome Assessment Results	General Education Outcome Assessment Results	Outcome Results Analysis
	In the boxes below, summarize the outcomes assessed in your class or course during the last year. If this is a GenEd class, include the appropriate GenEd objectives.	In the boxes below, list the proctored assignments and which problems on those assignments you used to assess each outcome.	In the boxes below, give the percentage of students who answered the problems correctly and indicate if the course outcome was achieved.	In the boxes below, give the average of the percentages of students who met course learning outcomes and indicate if the general education outcome was achieved.	In the boxes below, please reflect on this outcome's results and summarize how you plan to use the results to improve student learning.
Demonstrate knowledge Of mathematical notation and concepts	Outcome #1: Solve problems using the basic rules of probability.	Proctored assignment: Final Exam Problem numbers: 11.4.11 11.4.57 11.6.13 11.7.13 11.7.55	Results: On average, 11.2 out of 18 students answered correctly. (62.2%) Criterion Met: Yes/No	Average percentage: 55.45% Criterion Met: Yes/No	1. Results Analysis: Set theory and applications is a weak area for many students 2. Action Plan: More homework questions relevant to these topics should be considered to assign to students for more

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	<p>Outcome #2:</p> <p>Solve problems using basic set theory.</p>	<p>Proctored assignment: Midterm Exam 1</p> <p>Problem numbers: 2.3.69 2.3.135 2.4.53 2.5.23 2.5.34</p>	<p>Results: On average, 11.2 out of 23 students answered correctly. (48.7%)</p> <p>Criterion Met: Yes/No</p>		<p>practice.</p>
<p>Apply mathematical concepts and operations in proper written or graphical format</p>	<p>Outcome #3:</p> <p>Follow appropriate mathematical format and use proper mathematical notation in solving problems.</p>	<p>Proctored assignment: Final Exam</p> <p>Problem numbers: 10.2.23 9.3.49 10.4.23</p>	<p>Results: On average, 12.7 out of 18 students answered correctly. (70.4%)</p> <p>Criterion Met: Yes/No</p>	<p>Average percentage: 70.4%</p> <p>Criterion Met: Yes/No</p>	<p>1. Results Analysis: It seems that students are doing good to follow appropriate mathematical format and notation to solve problems.</p> <p>2. Action Plan:</p>
	<p>Outcome #4:</p> <p>Use mathematical formulas to evaluate problems involving financial data.</p>	<p>Proctored assignment: Final Exam</p> <p>Problem numbers: 8.3.3 8.3.11 8.5.39</p>	<p>Results: On average, 15 out of 18 students answered correctly. (83.3%)</p> <p>Criterion Met: Yes/No</p>	<p>Average percentage: 69.77%</p> <p>Criterion Met: Yes/No</p>	<p>1. Results Analysis: Applications on geometric figures and right angels and symbolic logic are weak areas</p>

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<p>Apply relevant mathematical skills in solving real-world problems</p> <p>Continued: Apply relevant mathematical skills in solving real-world problems</p>	<p>Outcome #5: Solve problems using dimensional analysis</p>	<p>Proctored assignment: Final Exam</p> <p>Problem numbers: 9.1.9 9.1.21 9.2.11 9.3.49</p>	<p>Results: On average, 15.75 out of 18 students answered correctly. (87.5%)</p> <p>Criterion Met: Yes/No</p>	<p>2. Action Plan: a) More questions relevant to those topics should be considered to assign in homework and quizzes for more practice.</p> <p>b) Some group studies and discussions could be conducted to enhance students' understanding about those topics.</p>
	<p>Outcome #6: Identify and analyze statistical data.</p>	<p>Proctored assignment: Final Exam</p> <p>Problem numbers: 12.2.3 12.2.13 12.4.11 12.3.5</p>	<p>Results: On average, 15.25 out of 18 students answered correctly. (84.7%)</p> <p>Criterion Met: Yes/No</p>	
	<p>Outcome #7: Use formal and symbolic logic to analyze arguments and draw valid conclusions.</p>	<p>Proctored assignment: Midterm Exam 1</p> <p>Problem numbers: 3.7.5 3.7.25 3.5.15 3.2.7</p>	<p>Results: On average, 10.25 out of 23 students answered correctly. (44.6%)</p> <p>Criterion Met: Yes/No</p>	
	<p>Outcome #8: Use trigonometry to solve problems involving right triangles.</p>	<p>Proctored assignment: Final Exam</p> <p>Problem numbers: 10.6.37 10.2.23</p>	<p>Results: On average, 11 out of 18 students answered correctly. (61.1%)</p> <p>Criterion Met: Yes/No</p>	

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	<p>Outcome #9:</p> <p>Calculate perimeter, area, surface area, and volume of various geometric objects.</p>	<p>Proctored assignment: Final Exam</p> <p>Problem numbers: 10.4.13 10.4.23 10.5.9</p>	<p>Results: On average, 10.3 out of 18 students answered correctly. (57.4%)</p> <p>Criterion Met: Yes/No</p>		
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Notes:

I have reviewed this report:

Department Chair

Date _____

Dean

Date _____

Vice President of Academic Affairs and Student Services

Date _____