Program Assessment Form (Academic Program)

Developmental Math

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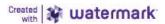


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General Information (Program Assessment Form (Academic Program))





Standing Requirements

NMC MISSION STATEMENT & ESIP (COLUMN 1 OF THE 5-COLUMN MODEL)

NMC Mission Statement:Northern Marianas College, through its commitment to student learning, provides high quality, affordable and accessible educational programs and services for the individual and people of the Commonwealth.ESIP for Developmental Math:The purpose of the developmental mathematics program is to effectively provide students the basic mathematics and algebraic skills and offer and provide support to students toward success in subsequent college-level math courses required for their degree or certificate programs.

OUTCOMES (COLUMN 2 OF THE 5-COLUMN MODEL)

Developmental Math Outcome Set

MA NDU PLO 1

Perform systematic estimating and calculating the set of real numbers.

Mapping

General Education Outcomes (GELOs): GEO Quantitative and Scientific Reasoning 6.1, GEO Quantitative and Scientific Reasoning 6.2

MA NDU PLO 2

Communicate and translate ideas from verbal to symbolic form and vice-versa for linear equations and inequalities.

Mapping

General Education Outcomes (GELOs): GEO Critical Thinking 1.1, GEO Critical Thinking 1.2

MA NDU PLO 3

Read and Interpret graphs of linear equations in two variables.

Mapping

General Education Outcomes (GELOs): GEO Critical Thinking 1.1, GEO Critical Thinking 1.2, GEO Quantitative and Scientific Reasoning 6.1, GEO Quantitative and Scientific Reasoning 6.2

MA NDU PLO 4

Solve systems of linear equations in two variables.

Mapping

General Education Outcomes (GELOs): GEO Critical Thinking 1.1, GEO Critical Thinking 1.2, GEO Quantitative and Scientific Reasoning 6.1, GEO Quantitative and Scientific Reasoning 6.2

MA NDU PLO 5

Demonstrate the use of polynomials and properties of exponents.



Mapping

General Education Outcomes (GELOs): GEO Critical Thinking 1.1, GEO Critical Thinking 1.2, GEO Quantitative and Scientific Reasoning 6.1, GEO Quantitative and Scientific Reasoning 6.2

MA NDU PLO 6

Demonstrate the ability to factor polynomials.

Mapping

General Education Outcomes (GELOs): GEO Quantitative and Scientific Reasoning 6.1, GEO Quantitative and Scientific Reasoning 6.2

MA NDU PLO 7

Apply various operations with rational expressions.

Mapping

General Education Outcomes (GELOs): GEO Critical Thinking 1.1, GEO Critical Thinking 1.2, GEO Quantitative and Scientific Reasoning 6.1, GEO Quantitative and Scientific Reasoning 6.2

Developmental Math Outcome Set_September 2020

PLO 4

Solve systems of linear equations in two variables.

Mapping

Developmental Math Outcome Set: MA NDU PLO 4, MA NDU PLO 5,

General Education Outcomes (GELOs): GEO Critical Thinking 1.1, GEO Critical Thinking 1.2

PLO₅

Demonstrate the use of polynomials and properties of exponents.

Mapping

Developmental Math Outcome Set: MA NDU PLO 4, MA NDU PLO 5,

General Education Outcomes (GELOs): GEO Critical Thinking 1.1, GEO Critical Thinking 1.2

CURRICULUM MAP

Active Curriculum Map s @

GELOS & PLOs NDU Math (See appendix)

Alignment Set GELOS & PLOs NDU Math

Created 11/10/2020 5:18:30 am WPST

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2020-2021 Assessment Cycle

MEANS OF ASSESSMENT & CRITERIA FOR SUCCESS (ASSESSMENT PLAN OR COLUMN 3 OF THE 5-COLUMN MODEL)

Mission Statement

NMC Mission Statement: Northern Marianas College, through its commitment to student learning, provides high quality, affordable and accessible educational programs and services for the individual and people of the Commonwealth.ESIP for Developmental Math: The purpose of the developmental mathematics program is to effectively provide students the basic mathematics and algebraic skills and offer and provide support to students toward success in subsequent college-level math courses required for their degree or certificate programs.

Measures

Developmental Math Outcome Set September 2020

Outcome

Outcome: PLO 4

Solve systems of linear equations in two variables.

Measure: Bell-Quizzes on Chapter 7

Course level Direct - Other

Details/Description: Bell-Quizzes on chapter 7 will be given to students to assess SLO 2.

Success Criteria: At least 70% of the students will be able to evaluate and solve polynomials and

quadratic equations.

Implementation Plan

(timeline):

Weeks when Chapter 7 is covered.

Key/Responsible

Personnel:

Mr. Sean Pak, Faculty Member

Measure: Chapter 2 On-line Quizzes

Course level Direct - Other

Details/Description: Online-Quizzes on chapter 2 will be given to students to assess SLO 2.

Success Criteria: At least 70% of the students who are assessed will be able to evaluate and solve

simple polynomials and quadratic equations.

Implementation Plan

(timeline):

Weeks when Chapter 2 is covered.

Key/Responsible Mr. Sean Pak, Faculty Member

Personnel:





Measure: Test Chapter 2 Course level Direct - Exam

Details/Description: Test on chapter 2 will be given to students to assess how well students master SLO

Success Criteria: At least 70% of the students who are assessed will be able to evaluate and solve

simple polynomials and quadratic equations.

Implementation Plan

(timeline):

Culmination of Chapter 2.

Key/Responsible

Personnel:

Mr. Sean Pak, Faculty Member

Outcome: PLO 5

Demonstrate the use of polynomials and properties of exponents.

Measure: Bell-Quizzes on Chapter 6

Course level Direct - Other

Details/Description: Bell-Quizzes on chapter 6 will be given to students to assess SLO 7.

Success Criteria: At least 70% of the students who are assessed will be able to solve systems of linear

equations in two variables and verify solutions to the system.

Implementation Plan

(timeline):

Weeks when Chapter 6 is covered.

Key/Responsible

Mr. Sean Pak, Faculty Member

Personnel:

Measure: Online-Quizzes on Chapter 6

Course level Direct - Other

Details/Description: Online Quizzes on chapter 6 will be given to students to assess SLO 7.

Success Criteria: At least 70% of the students who are assessed will be able to solve systems of linear

equations in two variables and verify solutions to the system.

Implementation Plan

(timeline):

Weeks when Chapter 6 is covered.

Key/Responsible

Mr. Sean Pak, Faculty Member

Personnel:

Measure: Test Chapter 6 Course level Direct - Exam

Details/Description: Test on chapter 6 will be given to students to assess SLO 7.

Success Criteria: At least 70% of the students who are assessed will be able to solve systems of linear

equations in two variables and verify solutions to the system.

Implementation Plan Culmination of Chapter 6.





(timeline):

Key/Responsible

Personnel:

Mr. Sean Pak, Faculty Member

SUMMARY OF DATA COLLECTED AND USE OF RESULTS (ASSESSMENT FINDINGS OR COLUMNS 4 & 5 OF THE 5-COLUMN MODEL)

Finding per Measure

Developmental Math Outcome Set_September 2020

Outcome

Outcome: PLO 4

Solve systems of linear equations in two variables.

Measure: Bell-Quizzes on Chapter 7

Course level Direct - Other

Details/Description: Bell-Quizzes on chapter 7 will be given to students to assess SLO 2.

Success Criteria: At least 70% of the students will be able to evaluate and solve polynomials and

quadratic equations.

Implementation Plan

(timeline):

Weeks when Chapter 7 is covered.

Key/Responsible

Personnel:

Mr. Sean Pak, Faculty Member

Findings for Bell-Quizzes on Chapter 7

Summary of Findings: The average of the Bell-Quizzes was 88%. 88% of the students who took the

quiz had the Acceptable or exceptional level which is above

70%.

Results: Success Criteria Achievement: Exceeded

Recommendations: The average of the Bell-Quizzes reached the target.

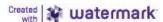
May use similar instructions including examples and exercises since the goal

has been reached.

I think the lecture videos I made and posted for each section in the textbook

were helpful for students to achieve the goal.

Reflections/Notes: See recommendations above.





Measure: Chapter 2 On-line Quizzes

Course level Direct - Other

Details/Description: Online-Quizzes on chapter 2 will be given to students to assess SLO 2.

Success Criteria: At least 70% of the students who are assessed will be able to evaluate and solve

simple polynomials and quadratic equations.

Implementation Plan

(timeline):

Weeks when Chapter 2 is covered.

Key/Responsible

Personnel:

Mr. Sean Pak, Faculty Member

Findings for Chapter 2 On-line Quizzes

Summary of Findings: The average of the Online-Quizzes was 89%. 92% of the students who took the

class work had the Acceptable or exceptional level which is above 70%.

Results: Success Criteria Achievement: Exceeded

Recommendations: The average of the Online-Quizzes reached the target.

May use similar instructions including examples and exercises since the goal

has been reached.

I think the lecture videos I made and posted for each section in the textbook

were helpful for students to achieve the goal.

Reflections/Notes: See recommendations above.

Measure: Test Chapter 2 *Course level Direct - Exam*

Details/Description: Test on chapter 2 will be given to students to assess how well students master SLO

2.

Success Criteria: At least 70% of the students who are assessed will be able to evaluate and solve

simple polynomials and quadratic equations.

Implementation Plan

(timeline):

Culmination of Chapter 2.

Key/Responsible

Mr. Sean Pak, Faculty Member

Personnel:

Findings for Test Chapter 2

Summary of Findings: The average of the chapter test together with chapter 6 and 7 was





87%.

94% of the students who took the test had the Acceptable or

exceptional level which is above 70%.

Results: Success Criteria Achievement: Exceeded

Recommendations: The average of the chapter test reached the target.

May use similar instructions including examples and exercises since the goal

has been reached.

I think the lecture videos I made and posted for each section in the textbook

were helpful for students to achieve the goal.

Reflections/Notes: See recommendations above.

Outcome: PLO 5

Demonstrate the use of polynomials and properties of exponents.

Measure: Bell-Quizzes on Chapter 6

Course level Direct - Other

Details/Description: Bell-Quizzes on chapter 6 will be given to students to assess SLO 7.

Success Criteria: At least 70% of the students who are assessed will be able to solve systems of linear

equations in two variables and verify solutions to the system.

Implementation Plan

(timeline):

Key/Responsible

Personnel:

Weeks when Chapter 6 is covered.

Mr. Sean Pak, Faculty Member

Findings for Bell-Quizzes on Chapter 6

Summary of Findings: The average of the Bell-Quizzes was 88%.

88% of the students who took the quiz had the Acceptable or

exceptional level which is above 70%.

Results: Success Criteria Achievement: Exceeded

Recommendations: The average of the Bell-Quizzes reached the target.

May use similar instructions including examples and

exercises since the goal has been reached.

I think the lecture videos I made and posted for each section in the textbook





were helpful for students to achieve the goal.

Reflections/Notes: See recommendations above.

Measure: Online-Quizzes on Chapter 6

Course level Direct - Other

Details/Description: Online Quizzes on chapter 6 will be given to students to assess SLO 7.

Success Criteria: At least 70% of the students who are assessed will be able to solve systems of linear

equations in two variables and verify solutions to the system.

Implementation Plan

(timeline):

Key/Responsible

Personnel:

Weeks when Chapter 6 is covered.

Mr. Sean Pak, Faculty Member

Findings for Online-Quizzes on Chapter 6

Summary of Findings: The average of the Online-Quizzes was 84%.

79% of the students who took the class work had the Acceptable or exceptional level which is above 70%.

Results: Success Criteria Achievement: Exceeded

Recommendations: The average of the Online-Quizzes reached the target.

May use similar instructions including examples and exercises since the goal

has been reached.

I think the lecture videos I made and posted for each section in the textbook

were helpful for students to achieve the goal.

Reflections/Notes: See recommendations above.

Measure: Test Chapter 6 Course level Direct - Exam

Details/Description: Test on chapter 6 will be given to students to assess SLO 7.

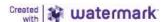
Success Criteria: At least 70% of the students who are assessed will be able to solve systems of linear

equations in two variables and verify solutions to the system.

Implementation Plan

(timeline):

Culmination of Chapter 6.





Key/Responsible

Mr. Sean Pak, Faculty Member

Personnel:

Findings for Test Chapter 6

Summary of Findings: The average of the chapter test together with chapter 6 and 7 was

87%.

94% of the students who took the test had the Acceptable or

exceptional level which is above 70%.

Results: Success Criteria Achievement: Exceeded

Recommendations: The average of the chapter test reached the target.

May use similar instructions including examples and exercises since the goal

has been reached.

I think the lecture videos I made and posted for each section in the textbook

were helpful for students to achieve the goal.

Reflections/Notes: See recommendations above.

Overall Recommendations

No text specified

Overall Reflection

No text specified

OPERATIONAL PLAN (THIS IS WHERE YOU CAN LINK AN OUTCOME TO AN ACTION PLAN WITH OR WITHOUT A SPECIAL BUDGET REQUEST.)

STATUS REPORT



2021-2022 Assessment Cycle

MEANS OF ASSESSMENT & CRITERIA FOR SUCCESS (ASSESSMENT PLAN OR COLUMN 3 OF THE 5-COLUMN MODEL)

SUMMARY OF DATA COLLECTED AND USE OF RESULTS (ASSESSMENT FINDINGS OR COLUMNS 4 & 5 OF THE 5-COLUMN MODEL)

OPERATIONAL PLAN (THIS IS WHERE YOU CAN LINK AN OUTCOME TO AN ACTION PLAN WITH OR WITHOUT A SPECIAL BUDGET REQUEST.)

STATUS REPORT



Pilot Programs/Practice Assessment Cycle (2009, 2016)

MEANS OF ASSESSMENT & CRITERIA FOR SUCCESS (ASSESSMENT PLAN)

ASSESSMENT FINDINGS

OPERATIONAL PLAN

STATUS REPORT (THIS SIMPLY STATES THE STATUS OF YOUR OPERATIONAL PLAN.)



2019-2020 Assessment Cycle

MEANS OF ASSESSMENT & CRITERIA FOR SUCCESS (ASSESSMENT PLAN OR COLUMN 3 OF THE 5-COLUMN MODEL)

SUMMARY OF DATA COLLECTED AND USE OF RESULTS (ASSESSMENT FINDINGS OR COLUMNS 4 & 5 OF THE 5-COLUMN MODEL)

OPERATIONAL PLAN (THIS IS WHERE YOU CAN LINK AN OUTCOME TO AN ACTION PLAN WITH OR WITHOUT A SPECIAL BUDGET REQUEST.)

STATUS REPORT (THIS SIMPLY STATES THE STATUS OF YOUR OPERATIONAL PLAN.)





Appendix

A. GELOS & PLOs NDU Math (Curriculum Map)