# **Assessment: Course Four Column**



## Courses (MATH) - Math

### **MATH 120 Jung:Fundamentals of Collage Math**

Number Theory

70% or higher

**Criterion:** Assignment average of

Course Outcomes	Assessment Measures	Results	Actions
Communication skills - General Education Learning Objective 1: Communication skills - Some degree Course Outcome Status: Active Next Assessment: 2021-2022 Start Date: 10/23/2017	Assignment - Written - Student written assignment Criterion: Assignment average of 70% or higher	Reporting Period: 2016-2017 Criterion Met: Yes Most students demonstrated required level of communication skills. Overall performance was satisfactory. Assignment averages was 81.1%. (10/23/2017)	Action: It appears that students did well in this part. Good work should be kept. (10/23/2017)
Apply mathematical concepts and critial Thinking - Apply mathematical concepts in a proper and organized manner and perform basic dimensional analysis problems converting one unit of measurement to another.  General Education Learning Objective 2: Critical Thinking- Strong Course Outcome Status: Active Next Assessment: 2021-2022 Start Date: 10/23/2017	Quiz - Quiz Ch 1: Logic Quiz Ch 2: Sets and Counting Quiz Ch 5: Finance Quiz Ch 7: Number systems and Number Theory  Criterion: Assignment average of 70% or higher	Reporting Period: 2016-2017 Criterion Met: Yes In order to measure students' critical thinking, the quizzes were designed in the areas of logic, sets, finance, and number systems.  • Assignment averages were 98.7, 75.2, 73.7, and 71.4% for Quiz Ch 1, 2, 5 and 7 respectively. (10/23/2017)	Action: Although students' overall achievement was satisfactory, I would like to look over the lecture for any improvement. on the number systems and number theory section because the average score on Ch 7 was relatively low. (10/23/2017)
Critical Thinking - Explain and apply basic set theory operations which includes Venn diagrams, cardinal numbers, tree diagrams, the	Quiz - Quiz Ch 1: Logic Quiz Ch 2: Sets and Counting Quiz Ch 5: Finance Quiz Ch 7: Number systems and	Reporting Period: 2016-2017 Criterion Met: Yes In order to measure students' critical thinking, the quizzes were designed in the areas of logic, sets, finance, and	Action: Although students' overall achievement was satisfactory, I would like to look over the lecture for any improvement. on the

combinations.

Fundamental Principle of Counting,

factorial notation, permutations and

General Education Learning Objective

2: Critical Thinking- Strong

number systems.

Assignment averages were 98.7, 75.2, 73.7, and 71.4% for

Quiz Ch 1, 2, 5 and 7 respectively (10/23/2017)

number systems and number

theory section because the

average score on Ch 7 was

relatively low. (10/23/2017)

Course Outcome Status: Active Next Assessment: 2021-2022 **Start Date:** 10/23/2017

#### Calculate and understand financial

situations - Calculate and understand financial situations involving money which include interest, annuities, and Quiz Ch 7: Number systems and loan amortization.

General Education Learning Objective Criterion: Assignment average of 2: Critical Thinking- Strong

Course Outcome Status: Active Next Assessment: 2021-2022 **Start Date:** 10/23/2017

Quiz - Quiz Ch 1: Logic

Quiz Ch 2: Sets and Counting

Quiz Ch 5: Finance

**Number Theory** 

70% or higher

Reporting Period: 2016-2017

Criterion Met: Yes

In order to measure students' critical thinking, the guizzes were designed in the areas of logic, sets, finance, and

number systems.

Assignment averages were 98.7, 75.2, 73.7, and 71.4% for Quiz Ch 1, 2, 5 and 7 respectively. (10/23/2017)

Action: Although students' overall achievement was satisfactory, I would like to look over the lecture for any improvement. on the number systems and number theory section because the average score on Ch 7 was relatively low. (10/23/2017)

Calculations involving the basic rules Quiz - Quiz Ch 3: Probability of probability - Perform calculations involving the basic rules of probability **Criterion:** Assignment average of

which includes odds, combinatorics, and expected value.

General Education Learning Objective 3: Personal/Cultural awareness-Some degree

Course Outcome Status: Active Next Assessment: 2021-2022 **Start Date:** 10/23/2017

Quiz Ch 4: Statistics

70% or higher

Reporting Period: 2016-2017

and 4 respectively. (10/23/2017)

**Criterion Met:** Yes

Students showed relatively low performance on these

chapters. Assignment averages were 69.4 and 74.3 % for Quiz Ch 3

**Action:** Although the overall achievement was satisfactory, I noticed that students struggled to understand the concepts of probability and statistics. Hands on activities such as using a deck of card for the chapters would make a better learning opportunity and friendly environment. (10/23/2017)

Identify basic statistical and data **analysis information -** Identify basic statistical and data analysis information which includes mean, median and mode, measures of dispersion, variance and standard deviation, and perform calculations involving the normal distribution and applications of the normal

General Education Learning Objective 3: Personal/Cultural awareness-Some degree

Quiz - Quiz Ch 3: Probability Quiz Ch 4: Statistics

**Criterion:** Assignment average of

70% or higher

Reporting Period: 2016-2017

**Criterion Met:** Yes

Students showed relatively low performance on these chapters.

Assignment averages were 69.4 and 74.3 % for Quiz Ch 3

and 4 respectively. (10/23/2017)

**Action:** Although the overall achievement was satisfactory, I noticed that students struggled to understand the concepts of probability and statistics. Hands on activities such as using a deck of card for the chapters would make a better learning opportunity and friendly environment. (10/23/2017)

distribution.

Course Outcome Status: Active Next Assessment: 2021-2022 Start Date: 10/23/2017

#### **Exponential and logarithmic**

**functions** - Evaluate exponential and logarithmic functions and solve exponential growth & decay problems.

General Education Learning Objective software.

4: Technology - Strong

Course Outcome Status: Active Next Assessment: 2021-2022 Start Date: 10/23/2017 Assignment - Written - Use of scientific calculator on all homework assignments, quizzes and exams. Students were required to submit assignments through the webdesign software

**Criterion:** Assignment average of

70% or higher

Reporting Period: 2016-2017

Criterion Met: No

In most homework assignments, students were required to use the scientific calculators. Their homework averages show that students are learning to use the scientific calculator in order to complete the assignments. Homework Assignment average was 53.2 % for the chapter 10. (10/23/2017)

Action: The technology aspect of the general education learning objective was measured through students' use of their scientific calculators on the chapter 10. Students didn't do well in this chapter. I will improve the lectures on Chapter 10 by adding the instruction on how to use a scientific calculator regarding exponential and logarithmic functions. (10/23/2017)

Follow-Up: The overall students' performance on this class was satisfactory, meeting all the criteria on all learning objectives except the general educationlearning objective, Technology. This learning objective was measured through Ch.10 **Exponential and Logarithmic** Functions. The reason I chose this chapter is that students are not familiar with how to use their scientific calculator on this topic. I will improve the lectures on Ch.10 by adding the instruction on how to use a scientific calculator regarding exponential and logarithmic functions. In addition, I identified students' weakness in Chapter 7 - Number systems and Number Theory. I am planning to improve the lectures for the chapter 7 by addressing more examples in the class and giving students more opportunity of

homework exercises. Students also struggled on the topics in probability and Statistics. I am going to revise the lectures on those chapters for improvement and will add hands on activities such as using a deck of card for friendlier environment. Students demonstrated satisfactory levels on all other learning objectives. (10/23/2017)