Assessment: Course Four Column

Courses (MATH) - Math

MATH 122:Num Concept for Elem Tchr

Course Outcomes	*Assessment Measures*	*Results*	*Actions*
Inductive and deductive reasoning to solve problems - Use inductive and deductive reasoning to solve problems. **Course Outcome Status:** Active **Next Assessment:** 2021-2022 **Start Date:** 09/05/2017	**Exam -** Midterm Exam #1 Questions #1 & #2 **Criterion:** Class exam average of 70% or higher on exam. Scoring 70% or higher on specific item on exam.	**Reporting Period:** 2016-2017 **Criterion Met:** Yes and No The exam average was 92%, with 100% of the students scoring 70% of higher. 12 out of 16 students scored 90% or higher. Qu. #1: 69% successful Qu. #2: 88% successful (02/07/2018)	**Action:** On question #1, some students were confused on the differences between arithmetic and geometric sequences. I will relate the concept more to real-life situations and perhaps, do more examples. (02/07/2018)
Basic calculations in a variety of number systems - Perform basic calculations in a variety of number systems. **Course Outcome Status:** Active **Next Assessment:** 2021-2022 **Start Date:** 09/05/2017	**Exam -** Midterm Exam #1 Questions #3 & #4 **Criterion:** Class exam average of 70% or higher on exam. Scoring 70% or higher on specific item on exam.	**Reporting Period:** 2016-2017 **Criterion Met:** Yes The exam average was 92%, with 100% of the students scoring 70% of higher. 12 out of 16 students scored 90% or higher. Qu. #3: 100% successful Qu. #4: 88% successful (02/07/2018)	**Action:** No action needed. I will keep using the same method of instruction (02/07/2018)
Correct use of set notation and operations - Make correct use of set notation and operations. **Course Outcome Status:** Active **Next Assessment:** 2021-2022 **Start Date:** 09/05/2017	**Exam -** Midterm #1 Questions #10 & #11 Final exam: Qu.#17 **Criterion:** Class exam average of 70% or higher on exam. Scoring 70% or higher on specific item on exam.	**Reporting Period:** 2016-2017 **Criterion Met:** No Midterm #1—The average was 92%, with 100% of the students scoring 70% of higher. 12 out of 16 students scored 90% or higher. Qu. #10: 44% successful Qu. #11: 56% successful Final Exam—The average was 82%, with 80% of the students scoring 70% of higher. One out of 5 students scored 90% or higher.	**Action:** Students had difficulty solving applied problems in two- and three- set problems, especially, using set notations to describe the regions. I will spend more time on explaining this concept. In addition, I will do few more examples in class. (02/07/2018)

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		Qu. #17—20% successful (02/07/2018)	
Basic mathematical operations and fundamental properties of real numbers - Demonstrate a deeper understanding of basic mathematical operations and fundamental properties of real numbers **Course Outcome Status:** Active **Next Assessment:** 2021-2022 **Start Date:** 09/05/2017	**Exam -** Midterm #1 exam Qu. 24 & 25 **Criterion:** Class exam average of 70% or higher on exam. Scoring 70% or higher on specific item on exam	**Reporting Period:** 2016-2017 **Criterion Met:** Yes The exam average was 92%, with 100% of the students scoring 70% of higher. 12 out of 16 students scored 90% or higher. Qu. #24: 88% successful Qu. #25: 75% successful (02/07/2018)	**Action:** No action needed. I will keep using the same method of instruction (02/07/2018)
Composite numbers from prime numbers - Develop composite numbers from prime numbers. **Course Outcome Status:** Active **Next Assessment:** 2021-2022 **Start Date:** 09/05/2017	**Exam -** Midterm #2 exam $7, 8, 12 **Criterion:** Class exam average of 70% or higher on exam. Scoring 70% or higher on specific item on exam.	**Reporting Period:** 2016-2017 **Criterion Met:** Yes Midterm #2—The average was 92%, with 100% of the students scoring 70% of higher. Nine out of 16 students scored 90% or higher. Qu. #7: 94% successful Qu. #8: 81% successful Qu. #12: 88% successful (02/07/2018)	**Action:** No action needed. I will keep using the same method of instruction (02/09/2018)
Development of the integers, rational numbers, and real numbers - Understand and explain clearly the development of the integers, rational numbers, and real numbers. **Course Outcome Status:** Active **Next Assessment:** 2021-2022 **Start Date:** 09/05/2017	**Exam -** Midterm #2 Qu. #23, 29 Final exam Qu. #13, 24 **Criterion:** Class exam average of 70% or higher on exam. Scoring 70% or higher on specific item on exam.	**Reporting Period:** 2016-2017 **Criterion Met:** Yes Midterm #2—The average was 92%, with 100% of the students scoring 70% of higher. 12 out of 16 students scored 90% or higher. Qu. #23: 69% successful Qu. #29: 88% successful Final Exam—The average was 82%, with 80% of the students scoring 70% of higher. One out of 5 students scored 90% or higher. Qu. #13—60% successful Qu. #24—100% successful (02/09/2018)	**Action:** Some students had difficulty in estimation when applied to real-life situation. Students were rounding up instead of rounding down and vice versa. I will try to explain to students with examples when to round up or down in estimating whole numbers. (02/09/2018)
Concepts, such as modular arithmetic and alternate techniques of calculating with the basic operations - Explain a familiarity with other concepts, such as modular arithmetic and alternate techniques	**Exam -** Midterm #1 Qu. #15, 16 **Criterion:** Class exam average of 70% or higher on exam. Scoring 70% or higher on specific item on exam.	**Reporting Period:** 2016-2017 **Criterion Met:** Yes and No The exam average was 92%, with 100% of the students scoring 70% of higher. 12 out of 16 students scored 90% or higher. Qu. #15: 88% successful	**Action:** It seemed students found somewhat difficulty in converting base-ten to different base, say, to base eight or seven. I will explain this concept better next time and relate concept to when other

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of calculating with the basic operations **Course Outcome Status:** Active **Next Assessment:** 2021-2022 **Start Date:** 09/05/2017		Qu. #16: 63% successful (02/09/2018)	bases are needed in real-life. Students are too used to performing operations in base ten. (02/09/2018)
Applied problems using a variety of techniques - Solve applied problems using a variety of techniques **Course Outcome Status:** Active **Next Assessment:** 2021-2022 **Start Date:** 09/05/2017	**Exam -** Final exam Qu. #3, 7, 9, 13, 20, 30 **Criterion:** Class exam average of 70% or higher on exam. Scoring 70% or higher on specific item on exam.	**Reporting Period:** 2016-2017 **Criterion Met:** Yes and No Final Exam—The average was 82%, with 80% of the students scoring 70% of higher. One out of 5 students scored 90% or higher. Qu. #3—100% successful Qu. #7—40% successful Qu. #9—100% successful Qu. #13—40% successful Qu. #20—60% successful Qu. #30—80% successful (02/09/2018)	**Action:** Students had difficulty in solving word problems involving percent and discount, concept of functions, and money related problems. Generally, students have word problems challenging. I will explain this concept better next time using algorithm. I will need to solve few more examples in class. (02/09/2018) **Follow-Up:** This was my time time of teaching this course. The class went very well being the first time teaching it and I would not make any major changes to structure of the class. I will maintain the assignment categories, but the final exam would not be comprehensive. What was done differently? Assignments would be due on Mondays instead of on Sundays. I found this due date very helpful to students because they would have opportunity to ask questions on the homework and quiz in class, if any. (02/09/2018)