Assessment: Course Four Column

Courses (MATH) - Math

MATH 128:Precalculus and Trigonometry

Course Outcomes	*Assessment Measures*	*Results*	*Actions*
Solve a variety of equations and inequalities - Solve a variety of equations and inequalities including linear, quadratic, polynomial, rational, absolute value, logarithmic, and exponential **Course Outcome Status:** Active **Next Assessment:** 2020-2021 **Start Date:** 06/20/2016	**Exam -** Final Exam #15 #16 **Criterion:** For all outcomes, success is students earning full credit on problems.	**Reporting Period:** 2015-2016 **Criterion Met:** N/A #15 57% earned 70% or higher. #16 0% earned 70% or higher. (06/20/2016)	**Action:** Both problems utilized logarithms. More explanation of basic log properties. (06/20/2016)
Graph a variety of functions - Graph a variety of functions including linear, quadratic, polynomial, absolute value, rational, greatest integer, exponential, logarithmic and piecewise-defined functions by finding domain, range, zeros, intercepts, asymptotes, and describing symmetries **Course Outcome Status:** Active **Next Assessment:** 2020-2021 **Start Date:** 06/20/2016	**Exam -** Final Exam #2 #3 #5 #10 #11 #13 #14 **Criterion:** Success is students earning full credit on problems.	**Reporting Period:** 2015-2016 **Criterion Met:** N/A #2 100% were successful. #3 50% were successful. #5 83% were successful. #10 67% were successful. (06/20/2016)	
Operations on complex numbers and matrices - Perform operations on complex numbers and matrices (Matrix inversion is optional.): **Course Outcome Status:** Active **Next Assessment:** 2020-2021	**Exam -** Final Exam #26 **Criterion:** Success is students earning full credit on problems.	**Reporting Period:** 2015-2016 **Criterion Met:** N/A 100% were successful. (06/20/2016)	**Action:** From this assessment, I can see that I need to provide more discussion and examples of problems reflecting just about every outcome for the course. So please note that is a change that I will make for every

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			outcome. In addition, however, I need to make more systemic changes. Those will be discussed in the notes below. (06/20/2016)
Real-world problems - Solve a variety of real-world problems involving quadratics, linear systems of equations, exponential and logarithmic functions **Course Outcome Status:** Active **Next Assessment:** 2020-2021 **Start Date:** 06/20/2016	**Evaluation -** Final Exam #17 #18 #24 #25 **Criterion:** Success is students earning full credit on problems.	**Reporting Period:** 2015-2016 **Criterion Met:** N/A #17 83% were successful. #18 67% were successful. #24 33% were successful. #25 17% were successful. (06/20/2016)	
Functions - Perform operations on functions, find the domain and range of a function as well as the inverse and difference quotient **Course Outcome Status:** Active **Next Assessment:** 2020-2021 **Start Date:** 06/20/2016	**Exam -** Final Exam #7 #8 #12 **Criterion:** Success is students earning full credit on problems.	**Reporting Period:** 2015-2016 **Criterion Met:** N/A #7 50% successful. #8 17% successful. #12 33% successful. (06/20/2016)	
Factor polynomials - Use synthetic division, the Division algorithm, Remainder Theorem, and Factor Theorem to factor polynomials **Course Outcome Status:** Active **Next Assessment:** 2020-2021 **Start Date:** 06/20/2016	**Exam -** Final Exam #9 **Criterion:** Success is students earning full credit on problems.	**Reporting Period:** 2015-2016 **Criterion Met:** N/A 17% successful. (06/21/2016)	
Six trigonometric functions - Compute values of the six trigonometric functions and their inverses **Course Outcome Status:** Active **Next Assessment:** 2020-2021 **Start Date:** 06/20/2016	**Exam -** Ch 7 & 8 Exam #1 #2 **Criterion:** Success is students earning full credit on problems.	**Reporting Period:** 2015-2016 **Criterion Met:** N/A #1 57% successful. #2 71% successful. (06/21/2016)	
Trigonometric identities - Verify and use trigonometric identities **Course Outcome Status:** Active **Next Assessment:** 2020-2021	**Exam -** Ch 5 & 6 Exam Ch 7 & 8 Exam #3 #4	**Reporting Period:** 2015-2016 **Criterion Met:** N/A #3 86% successful. #4 57% successful.	

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Start Date: 06/20/2016	#5 #6 **Criterion:** Success is students earning full credit on problems.	#5 29% successful. #6 71% successful. (06/21/2016)	
Graph and analyze - Graph and analyze parametric equations, trigonometric functions, conic sections, vectors, and polar equations and convert between the Cartesian and polar coordinate systems **Course Outcome Status:** Active **Next Assessment:** 2020-2021 **Start Date:** 06/20/2016	**Exam -** Final Exam #4 #31 #20 #21 #22 #23 #28 #29 **Criterion:** Success is students earning full credit on problems.	**Reporting Period:** 2015-2016 **Criterion Met:** N/A #4 83% successful. #20 83% successful. #21 67% successful. #22 83% successful. #23 50% successful. #28 50% successful. #29 33% successful. (06/21/2016)	
Vectors and use vectors to solve real-world problems - Perform operations with vectors and use vectors to solve real-world problems **Course Outcome Status:** Active **Next Assessment:** 2020-2021 **Start Date:** 06/20/2016	**Exam -** Final Exam #26 #27 **Criterion:** Students earn 100%.	**Reporting Period:** 2015-2016 **Criterion Met:** N/A #26 100% successful. #27 17% successful. (06/21/2016)	
Trigonometric equations and right or oblique triangles - Solve trigonometric equations and right or oblique triangles **Course Outcome Status:** Active **Next Assessment:** 2020-2021 **Start Date:** 06/13/2016	**Exam -** Final Exam #19 Chapters 7 & 8 Exam #8 **Criterion:** Students earn 100%.	**Reporting Period:** 2015-2016 **Criterion Met:** N/A Final Exam #19 83% successful. Chapters 7 & 8 Exam #8 29% successful (06/21/2016)	
Complex numbers in trigonometric form and perform operations - Express complex numbers in trigonometric form and perform operations with them **Course Outcome Status:** Active **Next Assessment:** 2020-2021 **Start Date:** 06/20/2016	**Exam -** Chapters 7 & 8 Exam #15 #16 **Criterion:** Students earn 100%.	**Reporting Period:** 2015-2016 **Criterion Met:** N/A #15 57% successful. #16 86% successful. (06/21/2016)	
Arithmetic and geometric sequences	**Exam -** Final Exam		

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and make effective use of sigma notation - Describe and define arithmetic and geometric sequences and make effective use of sigma notation **Course Outcome Status:** Active **Next Assessment:** 2020-2021 **Start Date:** 06/20/2016	#32 #33 **Criterion:** Students earn 100%.	**Reporting Period:** 2015-2016 **Criterion Met:** N/A #32 50% successful. #33 67% successful. (06/21/2016)	**Action:** I recognize that it is highly unlikely that all students will earn 100% on every problem, especially given the number of factors outside of the classroom that can affect student mastery. However, setting that goal helps me realize that, for example, even if 80% of students achieve mastery of a particular concept, there are still 20% who did not. This helps me a This course is not where I want it to be. There are some revisions I would like to explore. First, the final is too long. I am going to make a separate test that focuses solely on graphing, and remove those problems from the final. This graphing test can happen earlier in the semester. While I generally like the MyMathLab homework management system, I think it falls short on graphing. This was a live class. I felt I had a good rapport with the students and that my reading of their level of understanding was pretty accurate. The student evaluations for this course reflect this as well. However, clearly there is a difference between students feeling comfortable with the material in class and demonstrating those skills on a test. I need to incorporate more informal assessments in class. In addition, I need to respond more quickly when students have difficulty with the homework. I will include more instructions in the syllabus and WebCampus about how to utilize

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			MyMathLab to ensure students are taking advantage of all the material (like extra problems) that can help students achieve mastery. (06/21/2016)