MACU School of Math & Sciences

Mathematics, B.S.

Program Review

2018

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Mathematics B.S., Program Review, Section 1

Chair's Summary Statement about the State of the Program

Mid-America Christian University

Mathematics Program

Chair's Summary Statement about the State of the Program

Mid-America Christian University (MACU) is a faith-based institution of approximately 400 traditional undergraduate students which embraces the Church of God of Indiana tradition of scholarship and service. A primary goal of MACU is the delivery of a strong liberal arts curriculum with an emphasis on quality teaching. MACU awards the Bachelor of Science degrees in the mathematics program: Mathematics, Mathematics Multidisciplinary and Secondary Mathematics Education. The university is accredited by the Higher Learning Commission of North central Association of Colleges and Schools. The Secondary Mathematics Education program was recently reviewed in 2017 by the Office of Educational Quality and Accountability (OEQA) and was met with a few conditions. This program aligns with the standards of the National Council of Teachers of Mathematics.

Mathematics majors are required to take 51 hours of mathematics coursework, 46 hours in general education and 27 elective hours to allow those students with interests in medicine, engineering, physics, etc to complete those hours that will further their vocation of their choosing. Mathematics Multidisciplinary majors are required to take 32 hours of applied mathematics coursework, 30 hours in another multidisciplinary second option as well as 46 hours of general education courses. Secondary Mathematics Education majors are required to take 41 hours of mathematics coursework, 33 hours of professional education courses and 46 hours of general education courses.

Attendance in the program fluctuates greatly, but there is a steady graduation rate with students finding great jobs and using their degree upon graduation.

All 3 mathematics majors	enrolled	graduates
2015-16	18	6
2016-17	20	3
2017-18	17	3

Of the 6 graduates in 2015-16, 4 are teaching secondary mathematics, one was accepted into graduated graduate school and graduated a year and a half later with his MBA. One student was accepted into Oklahoma City Community College's (OCCC) Baccalaureate to Associate Degree Nurse Accelerated Pathway (BADNAP) program. One of the math graduates was MACU's valedictorian and another was the salutatorian.

Of the 3 graduates in 2016-17, 1 is working as a civilian in the U.S. Navy as an engineer, one was accepted into Oklahoma City Community College's (OCCC) Baccalaureate to Associate Degree Nurse Accelerated Pathway (BADNAP) program, and one is back in his country of origin, Brazil, and has started his own successful business.

Of the 3 graduates in 2017-18, 1 is pursuing acceptance into graduate school and a position in data analytics, one is pursuing a teaching career, and the other is finishing courses to receive his certification in architecture.

Program Outcomes 1 Knowledge of Problem Solving, Program Outcome 2 Knowledge of Reasoning and Proof, Program Outcome 3 Knowledge of Technology, Program Outcome 5 Knowledge of Different Perspectives on Algebra, and Program Outcome 6 Knowledge of Geometries were assessed in Fall 2016

and Spring 2017. Program Outcomes 4 Knowledge of Number and Operation, Program Outcome 7 Knowledge of Calculus, Program Outcome 8 Knowledge of Discrete Mathematics, and Program Outcome 9 Knowledge of Data Analysis, Statistics, and Probability were assessed in Fall 2015, Spring 2016, Fall 2017, and Spring 2018.

Mathematics B.S., Program Review, Section 2

Program Sheet from Catalog

Mathematics, B.S.

Effective: 08/01/2017

The B.S. in Mathematics provides a comprehensive understanding of the nature of mathematics and its relation to the sciences, philosophy and other liberal arts. In addition to general education and Bible coursework, course topics include geometry, calculus, linear algebra, abstract algebra, statistics, differential equations and mathematical modeling to provide a foundation on which graduates may begin a career in teaching, applied mathematics and research or pursue graduate studies.

University Core

Specific courses within the University Core are listed on the first page of this catalog section.

University Core (46 Hrs)
Bible/Theology (12 hrs)
Communication (9 hrs)
U.S. History and Government (6 hrs)
Science (6 hrs *plus 1 hr of lab*)
Math (3 hrs):
*MATH 1513 College Algebra
Social Sciences (3 hrs)
Humanities (6 hrs – *3 hrs must be literature*)

*These courses are required pre-requisites for the major and/or discipline. Upon completion of the above courses, corresponding University Core requirements will be satisfied. (These courses are required for this major regardless of previous degrees conferred). *See the Academic Program Requirements section of this Catalog for additional requirements.*

Orientation Requirement

Orientation (1Hr)
UNIV 1121 First Year Evangel

Major Requirements

Mathematics Core (29 Hrs)

MATH	2114	Calculus I and Analytic Geometry
MATH	2214	Calculus II
MATH	2313	Calculus III
MATH	3103	Linear Algebra
MATH	3403	Discrete Math
MATH	3703	Introduction to Statistics
MATH	4203	Mathematical Statistics
MISE	4103	Programming Concepts **OR**
MISE	*4603*	*Languages*
MATH	4113	Mathematical Modeling

Mathematics Theory Application (22)

MATH	1303	Plane Trigonometry
MATH	3303	History of Math
MATH	4003	College Geometry I
MATH	4013	Differential Equations
MATH	4103	Abstract Algebra
MATH	4303	College Geometry II
PHYS	2104	Physics I

Electives (24 Hrs)

Any Electives (24 Hrs). At least seven (7 Hrs) should be from upper division.

A student must have a minimum of 40 hours of 3000 and 4000 level courses in order to receive a Bachelor degree. Please note: This may require the student to take upper division elective hours in order to meet this graduation requirement.

Students may choose to replace combination of 30-39 courses in the Mathematics Theory Application courses and/or electives with a Multidisciplinary option (See Multidisciplinary options in the Academic Program Requirements section). Substitutions in math core may be made per advisor approval.

Total University Core	**46**
Total Orientation	**1**
Total Mathematics Core	**29**
Total Math Theory Application	**22**
Electives	**24**
Total Required Hours	**122**

Multidisciplinary Options

Multidisciplinary Options

Multidisciplinary options allow a unique opportunity for students interested in more than one academic discipline to choose a primary program and a secondary discipline of study. The courses required in the secondary discipline will be taken in lieu of the primary program's electives. At the time the student designates the primary and secondary multidisciplinary course of study, they must be approved by the chairpersons of the two academic disciplines.

- When a Multidisciplinary course of study is requested, it must be approved by both chairpersons of each discipline.
- Additional electives may be required to meet the minimum degree requirements
- Degree Programs – Multidisciplinary options are available with the degree programs listed below:
  - Biology
  - Ministry Leadership
  - Business Administration and Ethics
  - English
  - Mathematics
  - Psychology

One of the following Multidisciplinary focus areas may be added to any one of the above listed Degree Programs

Biology (34-37 Hrs)

Choose one focus area: Cellular, Human, or Organismal

Cellular (37 Hrs)

BIOL 1214 Biology I
BIOL 1314 Biology II
BIOL 3305 Microbiology
CHEM 1105 Chemistry I
CHEM 1205 Chemistry II
CHEM 2105 Organic Chemistry I
BIOL 3334 Cell Biology
BIOL 3354 Genetics
BIOL 4501 Biology Research

Human (36 Hrs)

BIOL 1214 Biology I
BIOL 1314 Biology II
BIOL 3305 Microbiology
CHEM 1105 Chemistry I
CHEM 1205 Chemistry II
BIOL 4124 Histology
BIOL 4501 Biology Research

Anatomy Options

BIOL 2314 Anatomy and Physiology I ***and***
BIOL 2324 Anatomy and Physiology II
or
BIOL 3114 Human Anatomy ***and***
BIOL 3214 Human Physiology

Organismal (34-35 Hrs)

BIOL 1214 Biology I
BIOL 1314 Biology II
CHEM 1105 Chemistry I
CHEM 1205 Chemistry II
BIOL 3214 Human Physiology
BIOL 4144 Plant Taxonomy
BIOL 4501 Biology Research

Organismal Options

BIOL 2114 General Zoology ***or***
BIOL 2214 General Botany
and
BIOL 3363 Evolution ***or***
BIOL 3404 Ecology

Business Administration and Ethics (30 Hrs)

BUAD 2103 Principles of Accounting I
BUAD 2203 Principles of Accounting II
BUAD 2503 Business and Professional Communication
BUAD 3403 Business Finance
BUAD 4303 Human Resource Administration
ECON 2503 Survey of Economics, Principles, Applications and Tools
MGMT 3213 Applied Business Management
MKTG 3103 Principles of Marketing
Select 6 additional hours from other courses within the discipline.

Ministry Leadership (33 Hrs)

BUAD 4203 Nonprofit/American Church Law
PMIN 1103 Foundations of Ministry
PMIN 1203 Christian Formation
PMIN 3103 Homiletics I
PMIN 3123 Evangelism and Discipleship
PMIN 3713 Workshop in the Ordinances
PMIN 4303 Leadership Formation
THEO 2103 Systematic Theology I
THEO 2203 Systematic Theology II

Select 3 additional hours of Inductive Bible Study Courses
BINT 3103 The Synoptic Gospels
BINT 3603 Hebrews and General Letters
BINT 3633 Pastoral Letters

Select 3 additional hours from Applied Learning Courses
PMIN 3133 Introduction to Spiritual Direction
PMIN 3643 Stephen Ministry
PMIN 4113 Internship in Professional Ministry
PMIN 4893 Practicum in Pastoral Care I
PMIN 4983 Practicum in Pastoral Care II

English (30 Hrs)

ENGL 3703 Creative Writing
ENGL 3503 Advanced Composition
ENGL 4203 Modern Grammar
ENGL 4303 Shakespeare
ENGL 4503 History of English Language
ENGL 4533 Crit. Approach to Literature
Select 12 additional hours from other courses within the discipline:
ENGL 2103 British Literature Survey I
ENGL 2203 British Literature Survey II
ENGL 2303 World Lit Sur: Ancient World-Renaissance
ENGL 2403 World Lit Sur: Renaissance-Modern Era
ENGL 2503 Amer Lit Sur: Before 1865
ENGL 2603 Amer Lit Sur: Since 1865

Mathematics (32 Hrs)

MATH 2114 Calculus I and Analytic Geometry
MATH 2214 Calculus II
MATH 2313 Calculus III
MATH 3103 Linear Algebra
MATH 3403 Discrete Math
MATH 4203 Mathematical Statistics
Select 9 additional hours from other courses within the discipline.
Select 3 hours from MISE (3 Hrs) Evening Classes:
MISE 4103 Programming Concepts
MISE 4603 Languages

Music (35 Hrs)

MUSI 2102 Music Theory I
MUSI 2101 Aural Skills I
MUSI 2202 Music Theory II
MUSI 2201 Aural Skills II
MUSI 3152 Conducting
MUSI 3602 Singing Diction
MUSI 4212 History and Literature of Music I
MUSI 4223 History and Literature of Music II
MUSI 4602 Hymnology/Music Text
MUSI 4242 Music Ministry
PMIN 3303 Christian Worship
Major Ensemble (4 Hrs)
AMUE 1311-3361 Major Ensemble
Piano (4 Hrs)
AMUS 1111-3151 Piano
Voice (4 Hrs)
AMUS 1111-3151 Voice
Music Endorsement Only:
1. Students must pass a piano proficiency exam.
2. Music majors must attend 6 recitals each semester.

Psychology (30 Hrs)

PSYC 3303 Development Across the Lifespan
PSYC 3113 History and Systems of Psychology
PSYC 3703 Introduction to Statistics
PSYC 3803 Introduction to Research Methods
PSYC 3903 Stress Management
PSYC 4703 Abnormal Psychology
PSYC 4803 Personality Theory and Development
PSYC 4813 Professional Ethics and Conduct
Select 6 additional hours from within the Psychology discipline.

Secondary Education, B.A.

Effective: 08/01/2017

Designed to align with rigorous standards set forth by Specialized Professional Associations (SPA) standards, the B.A. in Secondary Education equips those called to teach secondary education in the student's chosen area of specialization of either, English, Math, or Social Studies in public or private school settings. Students will gain theoretical knowledge and practical methodologies for successfully teaching to this age group as they prepare for a future beyond high school. Through experiential learning, students will gain hands-on experience so they may become effective teachers in the classroom. In addition to covering the subjects of child/adolescent and educational psychology, instructional technology, instructional strategies, and exceptional children, the program also includes: English - English teaching methods, literature, composition, creative writing, modern grammar, language and culture, and critical approach to literature; Math - secondary math methods, calculus, algebra, statistics, discrete math, and the history of math; or Social Studies - social studies teaching methods, world geography, U.S. history, American and Oklahoma history, macroeconomics, state and local government, historiography/research, cultural anthropology, and social psychology.

University Core
Specific courses within the University Core are listed on the first page of this catalog section.

University Core (46 Hrs)
Bible/Theology (12 hrs)
Communication (9 hrs)
U.S. History and Government (6 hrs)
Science (6 hrs *plus 1 hr of lab*):
*NATS 1014 General Biology and Lab
*NATS 2103 Environmental Science
Math (3 hrs):
*MATH 1513 College Algebra
Social Sciences (3 hrs):
*PSYC 1103 Introduction to Psychology
Humanities (6 hrs – *3 hrs must be literature*):
*ENGL 2303 World Literature Survey: The Ancient World to the Renaissance
*GEOG 2603 Human World Geography

*These courses are required pre-requisites for the major. Upon completion of the above courses, corresponding University Core requirements will be satisfied. (These courses are required for this major regardless of previous degrees conferred). *See the Academic Program Requirements section of this Catalog for additional requirements.*

Orientation Requirement
Orientation (1Hr)
UNIV 1121 First Year Evangel

Major Requirements

Professional Education (33 Hrs)
EDUC 2101 MACU Teacher Education Orientation
EDUC 2102 Education Foundations
EDUC 3103 Educational Psychology
EDUC 3203 Instructional Technologies
EDUC 3303 Development Across the Life Span
EDUC 4203 Instructional Strategies I

Professional Education (continued)
EDUC 4213 Instructional Strategies II
EDUC 4223 The Exceptional Child
EDUC 4909 Student Teaching
Methods of Teaching
Choose area of specialization see below and corresponding methods course (3 hrs)
EDUC 4803 Methods of Teaching Secondary English ***or***
EDUC 4703 Methods of Teaching Secondary Math ***or***
EDUC 4603 Methods of Teaching Secondary Social Studies

Secondary Education Areas of Specialization (44-45 Hrs)
Students may choose one area of specialization for their program of study (English, Math, or Social Studies).
Secondary English (45 Hrs)
ENGL 2103 British Literature Survey I
ENGL 2203 British Literature Survey II
ENGL 2403 World Lit. Sur: Renaissance to Modern Era
ENGL 2503 Amer. Lit Sur: Before 1865
ENGL 2603 Amer. Lit Sur: Since 1865
ENGL 3503 Advanced Composition
ENGL 3513 Major Figures **OR**
ENGL 3523 Special Topics
ENGL 3703 Creative Writing
ENGL 3713 Ethnic American Literature
ENGL 4203 Modern Grammar
ENGL 4303 Shakespeare
ENGL 4503 History of English Language
ENGL 4523 Young Adult Literature
ENGL 4533 Critical Approach to Literature
ENGL 4543 Language and Popular Culture

Secondary Mathematics (44 Hrs)
MATH 1303 Plane Trigonometry
MATH 2114 Calculus I and Analytic Geometry
MATH 2214 Calculus II
MATH 2313 Calculus III
MATH 3103 Linear Algebra
MATH 3303 History of Math
MATH 3403 Discrete Math
MATH 3703 Introduction to Statistics
MATH 4003 College Geometry I
MATH 4103 Abstract Algebra
MATH 4203 Mathematical Statistics
MATH 4303 College Geometry II
Electives (6 Hrs)
Select 3 hours from within the Math discipline and 3 hours from any area.

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Mathematics B.S., Program Review, Section 3

Program Assessment System

Assessment System for School of Math and Science

Program Outcome 1: Knowledge of Mathematical Problem Solving
students know, understand, and apply the process of mathematical problem solving

Student Outcome 1.1 The student will apply and adapt a variety of appropriate strategies to solve problems

K,S,D	Course Outcome	Course or Program Requirement	Method of Assessment	Criteria for Measurement	Point of Assessment	Direct or Indirect Assessment	Internal or External Assessment	Data Collection Timetable	Data Analysis Timetable	Program Improvement Timetable
K,S	1,4	Calculus I	Shadow Box Project	3 or above	Calculus I after related rates	Direct	Internal	End of Semester	End of school year	Following Fall
K,S	1,2,3,4,5	Calculus I	Lab Projects	3 or above	Weekly	Direct	Internal	End of Semester	End of school year	Following Fall
K,S	5	Calculus II	Lab Projects	3 or above	Weekly	Direct	Internal	End of Semester	End of school year	Following Fall

Program Outcome 2: Knowledge of Reasoning and Proof
students reason, construct, and evaluate mathematical arguments and develop an appreciation for mathematical rigor and inquiry.

Student Outcome 2.1 The student will make and investigate mathematical conjectures.

K,S,D	Course Outcome	Course or Program Requirement	Method of Assessment	Criteria for Measurement	Point of Assessment	Direct or Indirect Assessment	Internal or External Assessment	Data Collection Timetable	Data Analysis Timetable	Program Improvement Timetable
K,S	1,2,3	College Geometry I	Conjectures Sketchpad project	3 or above	End of Semester	Direct	Internal	End of Semester	End of school year	Following Fall
K,S	1,2,4,5	College Geometry II	Develop student's own geometry	3 or above	Final Project in College Geometry II	Direct	Internal	End of Semester	End of school year	Following Fall

Student Outcome 2.2 The student will develop and evaluate mathematical arguments and proofs.

K,S,D	Course Outcome	Course or Program Requirement	Method of Assessment	Criteria for Measurement	Point of Assessment	Direct or Indirect Assessment	Internal or External Assessment	Data Collection Timetable	Data Analysis Timetable	Program Improvement Timetable
K,S	3,4	College Geometry I	Proof Portfolio	3 or above	Final Project in College Geometry I	Direct	Internal	End of Semester	End of school year	Following Fall

Program Outcome 3: Knowledge of Technology
Students embrace technology as an essential tool for learning mathematics

Student Outcome 3.1 The student will use knowledge of mathematics to select and use appropriate technological tools, such as but not limited to, spreadsheets, dynamic graphing tools, computer algebra systems, dynamic statistical packages, graphing calculators, data-collection devices, and presentation software.

K,S,D	Course Outcome	Course or Program Requirement	Method of Assessment	Criteria for Measurement	Point of Assessment	Direct or Indirect Assessment	Internal or External Assessment	Data Collection Timetable	Data Analysis Timetable	Program Improvement Timetable
K,S	10	History of Math	Media Presentation	3 or above	History of Math Requirement	Direct	Internal	End of Semester	End of school year	Following Fall
K,S	1,2	Linear Algebra	Create Online Dancer	3 or above	Linear Algebra requirement	Direct	Internal	End of Semester	End of school year	Following Fall
K,S		Introduction to Statistics	Final Project Introduction to Statistics	3 or above	Final for Introduction to Statistics	Direct	Internal	End of Semester	End of school year	Following Fall

Program Outcome 4: Knowledge of Number and Operation
Candidates demonstrate computational proficiency, including a conceptual understanding of numbers, ways of representing number, relationships among number and number systems, and meanings of operations.

Student Outcome 4.1 The student will apply the fundamental ideas of number theory

K,S,D	Course Outcome	Course or Program Requirement	Method of Assessment	Criteria for Measurement	Point of Assessment	Direct or Indirect Assessment	Internal or External Assessment	Data Collection Timetable	Data Analysis Timetable	Program Improvement Timetable
K,S	2,4	Discrete Math	Code Portfolio	3 or above	End of Semester	Direct	Internal	End of Semester	End of School Year	Following Fall
K,S		Abstract Algebra	Graphing Calculator Programming Project	3 or above	End of Semester	Direct	Internal	End of Semester	End of School Year	Following Fall
Student Outcome 4.2 The student will recognize matrices and vectors as systems that have some of the properties of the real number system.										
K,S,D	Course Outcome	Course or Program Requirement	Method of Assessment	Criteria for Measurement	Point of Assessment	Direct or Indirect Assessment	Internal or External Assessment	Data Collection Timetable	Data Analysis Timetable	Program Improvement Timetable
K,S	1	Linear Algebra	Markov Chain Application project	3 or above	End of Semester	Direct	Internal	End of Semester	End of School Year	Following Fall
Student Outcome 4.4 The student will demonstrate knowledge of the historical development of number and number systems including contributions from diverse cultures.										
K,S,D	Course Outcome	Course or Program Requirement	Method of Assessment	Criteria for Measurement	Point of Assessment	Direct or Indirect Assessment	Internal or External Assessment	Data Collection Timetable	Data Analysis Timetable	Program Improvement Timetable
K,S	1	History of Math	Final Research paper	3 or above	Final for History of Math	Direct	Internal	End of Semester	End of school year	Following Fall
Program Outcome 5: Knowledge of Different Perspectives on Algebra **Candidates emphasize relationships among quantities including functions, ways of representing mathematical relationships, and the analysis of change.**										
Student Outcome 5.1 The student will analyze patterns, relations, and functions of one and two variables.										

K,S,D	Course Outcome	Course or Program Requirement	Method of Assessment	Criteria for Measurement	Point of Assessment	Direct or Indirect Assessment	Internal or External Assessment	Data Collection Timetable	Data Analysis Timetable	Program Improvement Timetable
K,S	1,2	Calculus I	Lab Projects	3 or above	Weekly	Direct	Internal	End of Semester	End of school year	Following Fall
Student Outcome 5.2 The student will apply fundamental ideas of linear algebra.										
K,S,D	Course Outcome	Course or Program Requirement	Method of Assessment	Criteria for Measurement	Point of Assessment	Direct or Indirect Assessment	Internal or External Assessment	Data Collection Timetable	Data Analysis Timetable	Program Improvement Timetable
K,S	1,2,3,4	Linear Algebra	Final Comprehensive Exam	70%	End of Semester	Direct	Internal	End of Semester	End of school year	Following Fall
Student Outcome 5.3 The student will apply the major concepts of abstract algebra to justify algebraic operations and formally analyze algebraic structures.										
K,S,D	Course Outcome	Course or Program Requirement	Method of Assessment	Criteria for Measurement	Point of Assessment	Direct or Indirect Assessment	Internal or External Assessment	Data Collection Timetable	Data Analysis Timetable	Program Improvement Timetable
K,S		Abstract Algebra	Final Comprehensive Exam	70%	End of Semester	Direct	Internal	End of Semester	End of school year	Following Fall
Student Outcome 5.4 The student will use mathematical models to represent and understand quantitative relationships.										
K,S,D	Course Outcome	Course or Program Requirement	Method of Assessment	Criteria for Measurement	Point of Assessment	Direct or Indirect Assessment	Internal or External Assessment	Data Collection Timetable	Data Analysis Timetable	Program Improvement Timetable
K,S	2,3,4,5	College Geometry II	Develop student's own geometry	3 or above	Final Project in College Geometry II	Direct	Internal	End of Semester	End of school year	Following Fall

K,S		Mathematical Modeling	Final Project in Mathematical Modeling	70%	Final for Mathematical Modeling	Direct	Internal	End of Semester	End of school year	Following Fall

Student Outcome 5.5 The student will demonstrate knowledge of the historical development of algebra including contributions from diverse cultures.

K,S,D	Course Outcome	Course or Program Requirement	Method of Assessment	Criteria for Measurement	Point of Assessment	Direct or Indirect Assessment	Internal or External Assessment	Data Collection Timetable	Data Analysis Timetable	Program Improvement Timetable
K,S	2	History of Math	Final Research paper	3 or above	Final for History of Math	Direct	Internal	End of Semester	End of school year	Following Fall

Program Outcome 6: Knowledge of Geometries
Candidates use spatial visualization and geometric modeling to explore and analyze geometric shapes, structures, and their properties.

Student Outcome 6.1 The student will demonstrate knowledge of core concepts and principles of Euclidean and non-Euclidean geometries in two and three dimensions from both formal and informal perspectives.

K,S,D	Course Outcome	Course or Program Requirement	Method of Assessment	Criteria for Measurement	Point of Assessment	Direct or Indirect Assessment	Internal or External Assessment	Data Collection Timetable	Data Analysis Timetable	Program Improvement Timetable
K,S	2,3,6	College Geometry I	Geometer's Sketchpad Project	3 or above	End of Semester	Direct	Internal	End of Semester	End of school year	Following Fall
K,S	2,4,5	College Geometry II	Geometer's Sketchpad Project	3 or above	End of Semester	Direct	Internal	End of Semester	End of school year	Following Fall

Student Outcome 6.2 The student will use concrete models, drawings, and dynamic geometric software to explore geometric ideas and their applications in real-world contexts.

K,S,D	Course Outcome	Course or Program Requirement	Method of Assessment	Criteria for Measurement	Point of Assessment	Direct or Indirect Assessment	Internal or External Assessment	Data Collection Timetable	Data Analysis Timetable	Program Improvement Timetable

K,S	1,4,5,6	College Geometry I	Proof Portfolio	3 or above	Final Project in College Geometry I	Direct	Internal	End of Semester	End of school year	Following Fall
K,S	1,4,5,6	College Geometry I	Geometer's Sketchpad Project	3 or above	End of Semester	Direct	Internal	End of Semester	End of school year	Following Fall
K,S	1,2,4,6	College Geometry II	Geometer's Sketchpad Project	3 or above	End of Semester	Direct	Internal	End of Semester	End of school year	Following Fall

Student Outcome 6.3 The student will demonstrate knowledge of the historical development of Euclidean and non-Euclidean geometries including contributions from diverse cultures.

K,S,D	Course Outcome	Course or Program Requirement	Method of Assessment	Criteria for Measurement	Point of Assessment	Direct or Indirect Assessment	Internal or External Assessment	Data Collection Timetable	Data Analysis Timetable	Program Improvement Timetable
K,S	3	History of Math	Final Research paper	3 or above	Final for History of Math	Direct	Internal	End of Semester	End of school year	Following Fall

Program Outcome 7: Knowledge of Calculus
Candidates demonstrate a conceptual understanding of limit, continuity, differentiation, and integration and a thorough background in the techniques and application of the calculus.

Student Outcome 7.1 The student will demonstrate a conceptual understanding of and procedural facility with basic calculus concepts.

K,S,D	Course Outcome	Course or Program Requirement	Method of Assessment	Criteria for Measurement	Point of Assessment	Direct or Indirect Assessment	Internal or External Assessment	Data Collection Timetable	Data Analysis Timetable	Program Improvement Timetable
K,S	2,3,4,5	Calculus I	Final Comprehensive Exam	70%	End of semester	Direct	Internal	End of Semester	End of school year	Following Fall

K,S	1,2,3,4	Calculus II	Final Comprehensive Exam	70%	End of semester	Direct	Internal	End of Semester	End of school year	Following Fall
K,S	1,2,3,4,5	Calculus III	Final Comprehensive Exam	70%	End of semester	Direct	Internal	End of Semester	End of school year	Following Fall

Student Outcome 7.2 The student will use the concepts of calculus and mathematical modeling to represent and solve problems taken from real-world contexts.

K,S,D	Course Outcome	Course or Program Requirement	Method of Assessment	Criteria for Measurement	Point of Assessment	Direct or Indirect Assessment	Internal or External Assessment	Data Collection Timetable	Data Analysis Timetable	Program Improvement Timetable
K,S	1,4	Calculus I	Shadow Box Lab	3 or above	Calculus I after related rates	Direct	Internal	End of Semester	End of school year	Following Fall

Student Outcome 7.3 The student will demonstrate knowledge of the historical development of calculus including contributions from diverse cultures.

K,S,D	Course Outcome	Course or Program Requirement	Method of Assessment	Criteria for Measurement	Point of Assessment	Direct or Indirect Assessment	Internal or External Assessment	Data Collection Timetable	Data Analysis Timetable	Program Improvement Timetable
K,S	4	History of Math	Final Research paper	3 or above	Final for History of Math	Direct	Internal	End of Semester	End of school year	Following Fall

Program Outcome 8: Knowledge of Discrete Mathematics
Candidates apply the fundamental ideas of discrete mathematics in the formulation and solution of problems.

Student Outcome 8.1 The student will apply the fundamental ideas of discrete mathematics in the formulation and solution of problems arising from real-world situations

K,S,D	Course Outcome	Course or Program Requirement	Method of Assessment	Criteria for Measurement	Point of Assessment	Direct or Indirect Assessment	Internal or External Assessment	Data Collection Timetable	Data Analysis Timetable	Program Improvement Timetable

K,S	1,2,4	Discrete Math	Final Comprehensive Exam	70%	End of Semester	Direct	Internal	End of Semester	End of school year	Following Fall

Program Outcome 9: Knowledge of Data Analysis, Statistics, and Probability
Candidates demonstrate an understanding of concepts and practices related to data analysis, statistics, and probability.

Student Outcome 9.1 The student will design investigations, collect data, and use a variety of ways to display data and interpret data representations that may include bivariate data, conditional probability and geometric probability.

K,S,D	Course Outcome	Course or Program Requirement	Method of Assessment	Criteria for Measurement	Point of Assessment	Direct or Indirect Assessment	Internal or External Assessment	Data Collection Timetable	Data Analysis Timetable	Program Improvement Timetable
K,S		Introduction to Statistics	Final Project Introduction to Statistics	3 or above	Final for Introduction to Statistics	Direct	Internal	End of Semester	End of school year	Following Fall
K,S	1,3,4,5	Mathematical Statistics	Final Project in Mathematical Statistics	3 or above	Final for Mathematical Statistics	Direct	Internal	End of Semester	End of school year	Following Fall

Student Outcome 9.2 The student will use appropriate statistical methods and technological tools to describe shape and analyze spread and center.

K,S,D	Course Outcome	Course or Program Requirement	Method of Assessment	Criteria for Measurement	Point of Assessment	Direct or Indirect Assessment	Internal or External Assessment	Data Collection Timetable	Data Analysis Timetable	Program Improvement Timetable
K,S		Introduction to Statistics	Analysis of Spread and Center Exam	70%	First test in Fall semesters	Direct	Internal	End of Semester	End of school year	Following Fall
K,S	2,3,4,6,7	Mathematical Statistics	Analysis of Spread and Center Exam	3 or above	End of semester	Direct	Internal	End of Semester	End of school year	Following Fall

Student Outcome 9.3 The student will use statistical inference to draw conclusions from data.

K,S,D	Course Outcome	Course or Program Requirement	Method of Assessment	Criteria for Measurement	Point of Assessment	Direct or Indirect Assessment	Internal or External Assessment	Data Collection Timetable	Data Analysis Timetable	Program Improvement Timetable
K,S		Introduction to Statistics	Confidence Interval Construction Exam	70%	During Semester	Direct	Internal	End of Semester	End of school year	Following Fall
K,S		Introduction to Statistics	Hypothesis Test Final Project	3 or above	End of semester	Direct	Internal	End of Semester	End of school year	Following Fall
K,S	6,7,8	Mathematical Statistics	Hypothesis Test Final Project	3 or above	End of semester	Direct	Internal	End of Semester	End of school year	Following Fall
Student Outcome 9.4 The student will demonstrate knowledge of the historical development of statistics and probability including contributions from diverse cultures.										
K,S,D	Course Outcome	Course or Program Requirement	Method of Assessment	Criteria for Measurement	Point of Assessment	Direct or Indirect Assessment	Internal or External Assessment	Data Collection Timetable	Data Analysis Timetable	Program Improvement Timetable
K,S	5	History of Math	Final Research paper	3 or above	End of semester	Direct	Internal	End of Semester	End of school year	Following Fall

Mathematics B.S., Program Review, Section 4

Program Curriculum Map with PO and SLO explanations

Mid-America Christian University - College of Arts and Sciences - School of Math and Science

Mathematics / BS Program Curriculum Map			Plane Trigonometry	Calculus I and Analytic Geometry	Calculus II	Casculus III	Linear Algebra	History of Math	Discrete Math	Introduction to Statistics	Mathematical Statistics	Programming Concepts	Languages	College Geometry I	Differential Equations	Abstract Algebra	Mathematical Modeling	College Geometry II	Physics I
Program Outcomes		SLOs	MATH 1303	MATH 2114	MATH 2214	MATH 2313	MATH 3103	MATH 3303	MATH 3403	MATH 3703	MATH 4203	MISE 4103	MISE 4603	MATH 4003	MATH 4013	MATH 4103	MATH 4113	MATH 4303	PHYS 2104
1	Knowledge of Mathematical Problem Solving: Students know, understand, and apply the process of mathematical problem solving	1.1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
2	Knowledge of Reasoning and Proof: students reason, construct, and evaluate mathematical arguments and develop an appreciation for mathematical rigor and inquiry.	2.1 2.2							X		X			X		X		X	
3	Knowledge of Technology: Students embrace technology as an essential tool for learning mathematics	3.1	X	X	X	X	X		X	X	X	X	X	X	X		X	X	X
4	Knowledge of Number and Operation: Students demonstrate computational proficiency, including a conceptual understanding of numbers, ways of representing number, relationships among number and number systems, and meanings of operations.	4.1 4.2 4.4				X	X	X	X			X	X	X	X	X	X	X	X

5	Knowledge of Different Perspectives on Algebra: Students emphasize relationships among quantities including functions, ways of representing mathematical relationships, and the analysis of change.	5.1 5.2 5.3 5.4 5.5	x	x	x	x	x	x	x		x			x	x	x	x	x	x
6	Knowledge of Geometries: Students use spatial visualization and geometric modeling to explore and analyze geometric shapes, structures, and their properties.	6.1 6.2 6.3	x	x	x	x	x	x						x			x	x	x
7	Knowledge of Calculus: Candidates demonstrate a conceptual understanding of limit, continuity, differentiation, and integration and a thorough background in the techniques and application of the calculus.	7.1 7.2 7.3		x	x	x		x			x				x				x
8	Knowledge of Discrete Mathematics: Students apply the fundamental ideas of discrete mathematics in the formulation and solution of problems.	8.1					x	x	x	x	x					x	x		
9	Knowledge of Data Analysis, Statistics, and Probability: Students demonstrate an understanding of concepts and practices related to data analysis, statistics, and probability.	9.1 9.2 9.3 9.4			x			x	x	x	x								

Student Learning Outcomes

1.1 The student will apply and adapt a variety of appropriate strategies to solve problems

2.1 The student will make and investigate mathematical conjectures.

2.2 The student will develop and evaluate mathematical arguments and proofs.

3.1 The student will use knowledge of mathematics to select and use appropriate technological tools, such as but not limited to, spreadsheets, dynamic graphing tools, computer

4.1 The student will apply the fundamental ideas of number theory

4.2 The student will recognize matrices and vectors as systems that have some of the properties of the real number system.

4.4 The student will demonstrate knowledge of the historical development of number and number systems including contributions from diverse cultures.

5.1 The student will analyze patterns, relations, and functions of one and two variables.

5.2 The student will apply fundamental ideas of linear algebra.

5.3 The student will apply the major concepts of abstract algebra to justify algebraic operations and formally analyze algebraic structures.

5.4 The student will use mathematical models to represent and understand quantitative relationships.

5.5 The student will demonstrate knowledge of the historical development of algebra including contributions from diverse cultures.

6.1 The student will demonstrate knowledge of core concepts and principles of Euclidean and non-Euclidean geometries in two and three dimensions from both formal and informal perspectives.

6.2 The student will use concrete models, drawings, and dynamic geometric software to explore geometric ideas and their applications in real-world contexts.

6.3 The student will demonstrate knowledge of the historical development of Euclidean and non-Euclidean geometries including contributions from diverse cultures.

7.1 The student will demonstrate a conceptual understanding of and procedural facility with basic calculus concepts.

7.2 The student will use the concepts of calculus and mathematical modeling to represent and solve problems taken from real-world contexts.

7.3 The student will demonstrate knowledge of the historical development of calculus including contributions from diverse cultures.

8.1 The student will apply the fundamental ideas of discrete mathematics in the formulation and solution of problems arising from real-world situations

9.1 The student will design investigations, collect data, and use a variety of ways to display data and interpret data representations that may include bivariate data, conditional probability and geometric probability.

9.2 The student will use appropriate statistical methods and technological tools to describe shape and analyze spread and center.

9.3 The student will use statistical inference to draw conclusions from data.

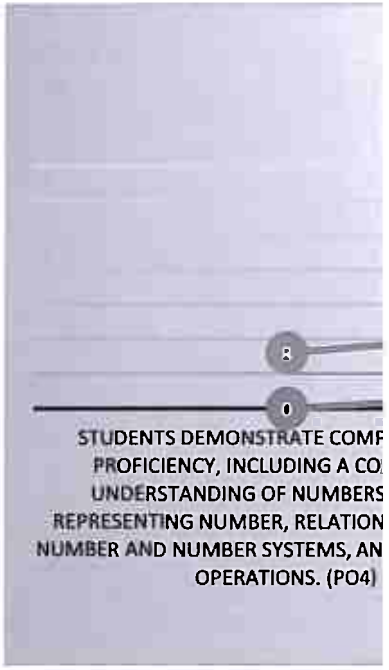
9.4 The student will demonstrate knowledge of the historical development of statistics and probability including contributions from diverse cultures.

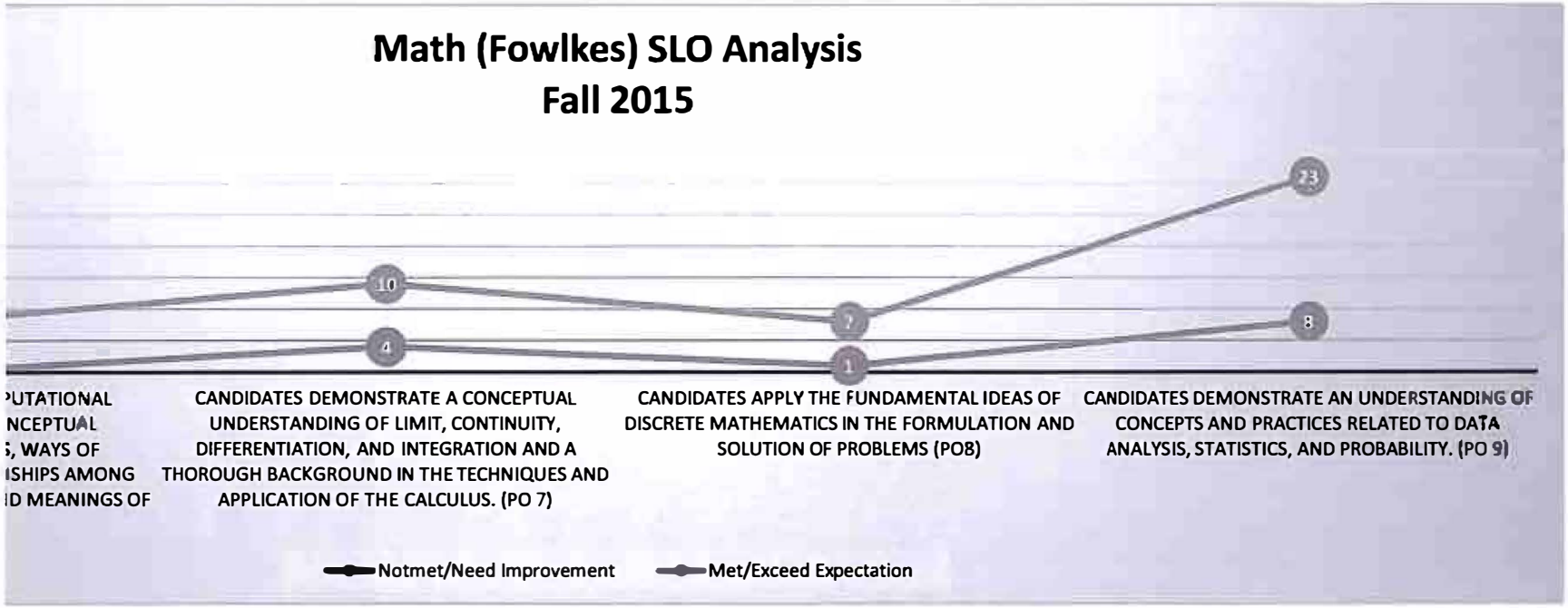
Mathematics B.S., Program Review, Section 5

Three-year Program Assessment using POs and SLOs

Program Outcome and Student Learning Outcome Data Analysis
Fall 2015

List Programs and Student Outcomes Measured	Notmet/Need Improvement	Met/Exceed Expectation
Students demonstrate computational proficiency, including a conceptual understanding of numbers, ways of representing number, relationships among number and number systems, and meanings of operations. (PO4)	0	8
Candidates demonstrate a conceptual understanding of limit, continuity, differentiation, and integration and a thorough background in the techniques and application of the calculus. (PO 7)	4	10
Candidates apply the fundamental ideas of discrete mathematics in the formulation and solution of problems (PO8)	1	7
Candidates demonstrate an understanding of concepts and practices related to data analysis, statistics, and probability. (PO 9)	8	23




Math (Fowlkes) SLO Analysis
Fall 2015
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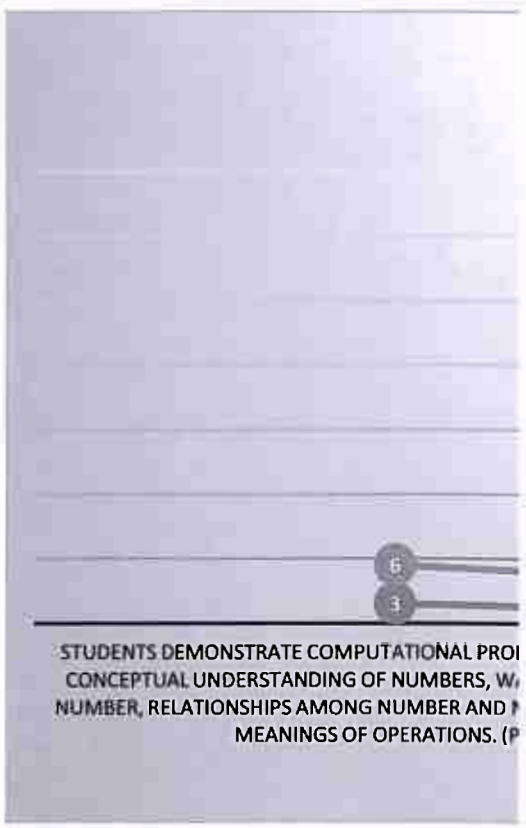
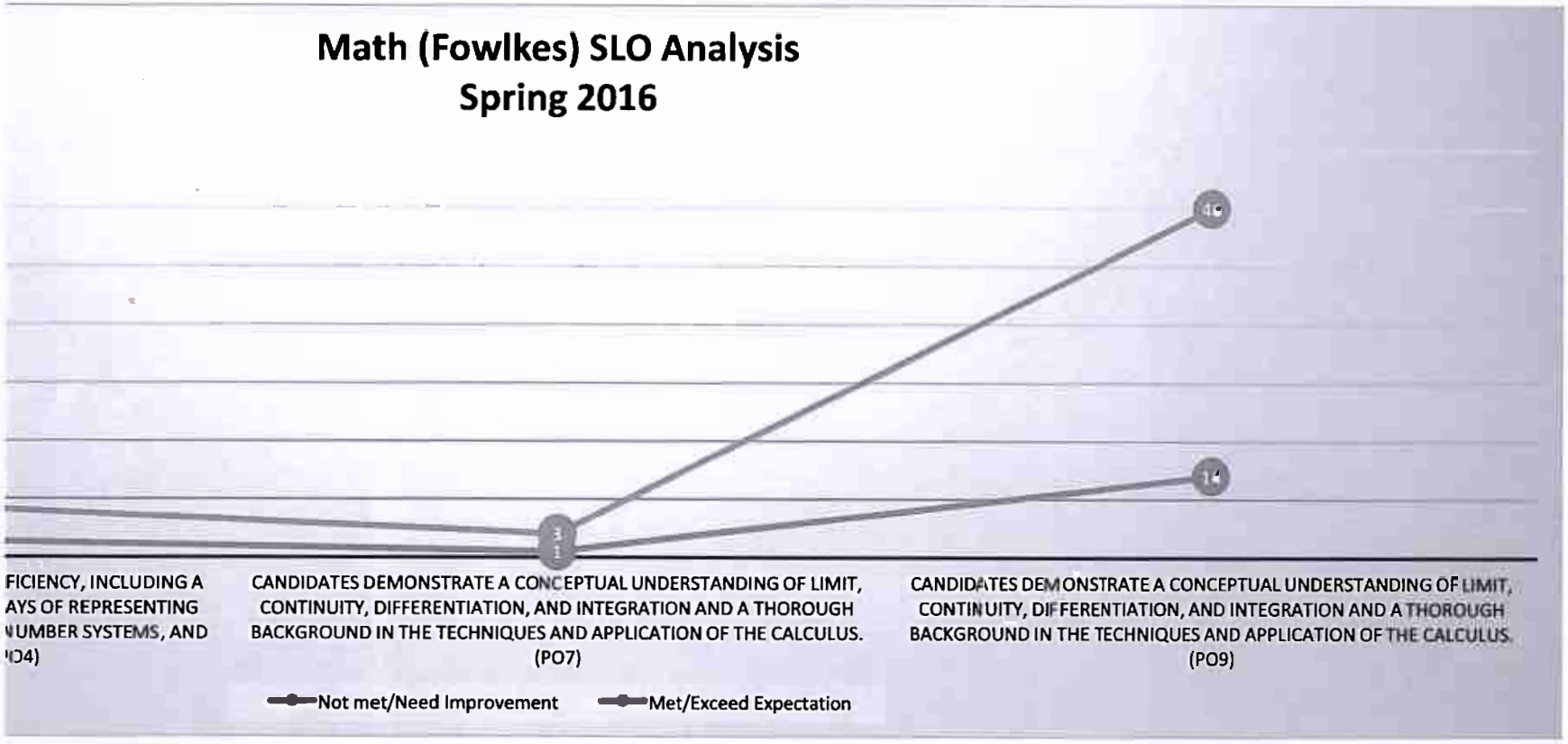
CANDIDATES DEMONSTRATE A CONCEPTUAL UNDERSTANDING OF LIMIT, CONTINUITY, DIFFERENTIATION, AND INTEGRATION AND A THOROUGH BACKGROUND IN THE TECHNIQUES AND APPLICATION OF THE CALCULUS. (PO 7)
CANDIDATES APPLY THE FUNDAMENTAL IDEAS OF DISCRETE MATHEMATICS IN THE FORMULATION AND SOLUTION OF PROBLEMS (PO8)
CANDIDATES DEMONSTRATE AN UNDERSTANDING OF CONCEPTS AND PRACTICES RELATED TO DATA ANALYSIS, STATISTICS, AND PROBABILITY. (PO 9)
Notmet/Need Improvement
Met/Exceed Expectation

Program Outcome and Student Learning Outcome Data Analysis
Spring 2016

List Programs and Student Outcomes Measured	Not met/Need Improvement	Met/Exceed Expectation
Students demonstrate computational proficiency, including a conceptual understanding of numbers, ways of representing number, relationships among number and number systems, and meanings of operations. (PO4)	3	6
Candidates demonstrate a conceptual understanding of limit, continuity, differentiation, and integration and a thorough background in the techniques and application of the calculus. (PO7)	1	3
Candidates demonstrate a conceptual understanding of limit, continuity, differentiation, and integration and a thorough background in the techniques and application of the calculus. (PO9)	14	46

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CANDIDATES DEMONSTRATE A CONCEPTUAL UNDERSTANDING OF LIMIT, CONTINUITY, DIFFERENTIATION, AND INTEGRATION AND A THOROUGH BACKGROUND IN THE TECHNIQUES AND APPLICATION OF THE CALCULUS. (PO7)
CANDIDATES DEMONSTRATE A CONCEPTUAL UNDERSTANDING OF LIMIT, CONTINUITY, DIFFERENTIATION, AND INTEGRATION AND A THOROUGH BACKGROUND IN THE TECHNIQUES AND APPLICATION OF THE CALCULUS. (PO9)
Not met/Need Improvement
Met/Exceed Expectation

Program Outcome and Student Learning Outcome Data Analysis
Fall 2016/Spring 2017

List Programs and Student Outcomes Measured	Notmet/Need Improvement	Met/Exceed Expectation
Students reason, construct, and evaluate mathematical arguments and develop and appreciation for mathematical rigor and inquiry. (PO2)	0	2
Students embrace technology as an essential tool for learning mathematics. (PO 3)	2	2
(PO5)	4	8
(PO 6)	0	2
(PO7)	2	1
(PO 9)	5	23

Math and Science

Program Outcomes Spring 2017

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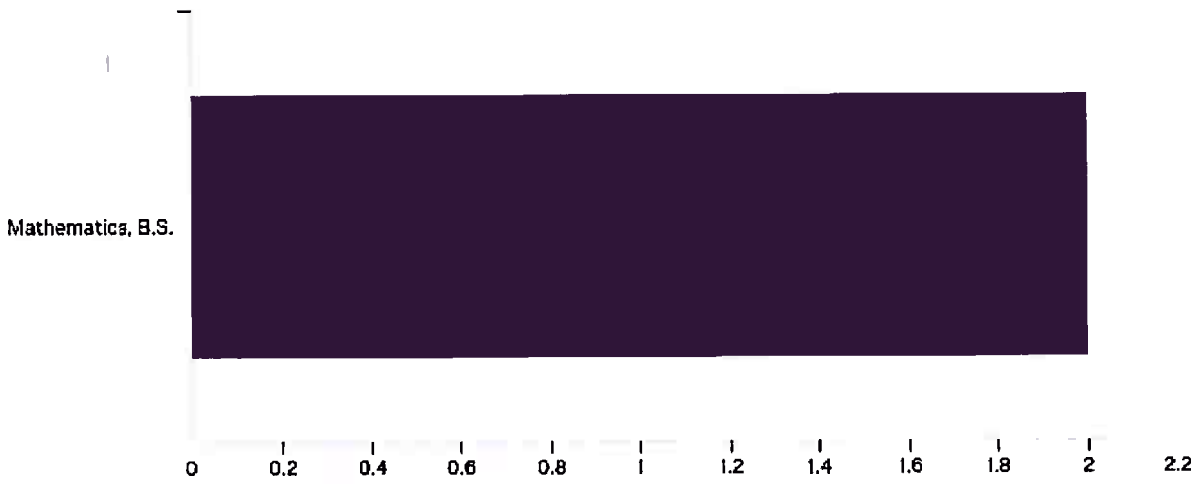
M&S - Math and Science



#	Answer	%	Count
4	Mathematics, B.S.	100.00%	2
	Total	100%	2

MATH - Program Outcome 1: Students know, understand, and apply the process of mathematical problem solving.

Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
Number of Students Not Met	0.00	0.00	0.00	0.00	0.00	1
Number of Students Needs Improvement	0.00	0.00	0.00	0.00	0.00	1
Number of Students Met	0.00	0.00	0.00	0.00	0.00	1
Number of Students Exceeds Expectations	3.00	3.00	3.00	0.00	0.00	1

MATH - Program Outcome 2: Students reason, construct, and evaluate mathematical arguments and develop and appreciation for mathematical rigor and inquiry.

Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
Number of Students Not Met	0.00	0.00	0.00	0.00	0.00	1
Number of Students Needs Improvement	0.00	0.00	0.00	0.00	0.00	1
Number of Students Met	0.00	0.00	0.00	0.00	0.00	1
Number of Students Exceeds Expectations	2.00	2.00	2.00	0.00	0.00	1

MATH - Program Outcome 3: Students embrace technology as an essential tool for learning mathematics.

Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
Number of Students Not Met	2.00	2.00	2.00	0.00	0.00	1
Number of Students Needs Improvement	0.00	0.00	0.00	0.00	0.00	1
Number of Students Met	0.00	0.00	0.00	0.00	0.00	1
Number of Students Exceeds Expectations	2.00	2.00	2.00	0.00	0.00	1

MATH - Program Outcome 4: Students demonstrate computational proficiency, including a conceptual understanding of numbers, ways of representing number, relationships among number and number systems, and meanings of operations.

Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
Number of Students Not Met	0.00	0.00	0.00	0.00	0.00	1
Number of Students Needs Improvement	0.00	0.00	0.00	0.00	0.00	1
Number of Students Met	0.00	0.00	0.00	0.00	0.00	1
Number of Students Exceeds Expectations	0.00	0.00	0.00	0.00	0.00	1

MATH - Program Outcome 5: Candidates emphasize relationships among quantities including functions, way of representing mathematical relationships, and the analysis of change.

Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
Number of Students Not Met	4.00	4.00	4.00	0.00	0.00	1
Number of Students Needs Improvement	0.00	0.00	0.00	0.00	0.00	1
Number of Students Met	0.00	0.00	0.00	0.00	0.00	1
Number of Students Exceeds Expectations	8.00	8.00	8.00	0.00	0.00	1

MATH - Program Outcome 6: Candidates use spatial visualization and geometric modeling to explore and analyze geometric shapes, structures, and their properties.

Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
Number of Students Not Met	0.00	0.00	0.00	0.00	0.00	1
Number of Students Needs Improvement	0.00	0.00	0.00	0.00	0.00	1
Number of Students Met	2.00	2.00	2.00	0.00	0.00	1
Number of Students Exceeds Expectations	0.00	0.00	0.00	0.00	0.00	1

MATH - Program Outcome 7: Candidates demonstrate a conceptual understanding of limit, continuity, differentiation, and integration and a thorough background in the techniques and application of the calculus.

Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
Number of Students Not Met	2.00	2.00	2.00	0.00	0.00	1
Number of Students Needs Improvement	0.00	0.00	0.00	0.00	0.00	1
Number of Students Met	0.00	0.00	0.00	0.00	0.00	1
Number of Students Exceeds Expectations	1.00	1.00	1.00	0.00	0.00	1

MATH - Program Outcome 8: Candidates apply the fundamental ideas of discrete mathematics in the formulation and solution of problems.

Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
Number of Students Not Met	0.00	0.00	0.00	0.00	0.00	1
Number of Students Needs Improvement	0.00	0.00	0.00	0.00	0.00	1
Number of Students Met	0.00	0.00	0.00	0.00	0.00	1
Number of Students Exceeds Expectations	0.00	0.00	0.00	0.00	0.00	1

MATH - Program Outcome 9: Candidates demonstrate an understanding of concepts and practices related to data analysis, statistics, and probability.

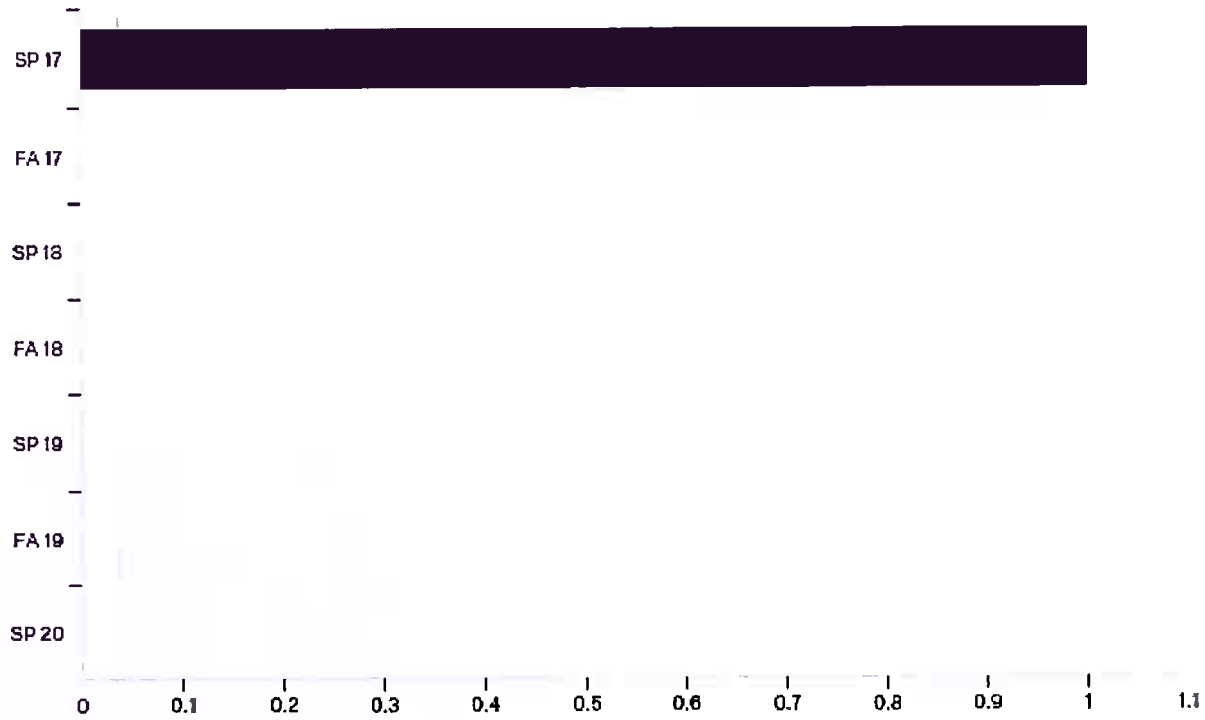
Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
Number of Students Not Met	5.00	5.00	5.00	0.00	0.00	1
Number of Students Needs Improvement	0.00	0.00	0.00	0.00	0.00	1
Number of Students Met	11.00	11.00	11.00	0.00	0.00	1
Number of Students Exceeds Expectations	12.00	12.00	12.00	0.00	0.00	1

MATH - Your Name (Completing this survey)

Your Name (Completing this survey)

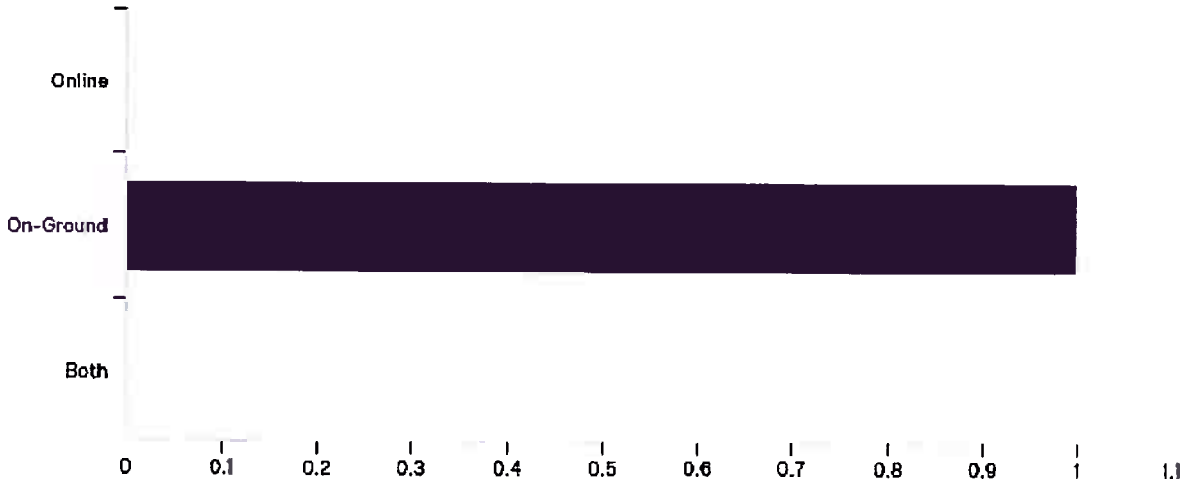
Carol Fowlkes

MATH - Semester being assessed



#	Answer	%	Count
1	SP 17	100.00%	1
2	FA 17	0.00%	0
3	SP 18	0.00%	0
4	FA 18	0.00%	0
5	SP 19	0.00%	0
6	FA 19	0.00%	0
7	SP 20	0.00%	0
	Total	100%	1

MATH - Delivery Modality



#	Answer	%	Count
1	Online	0.00%	0
2	On-Ground	100.00%	1
3	Both	0.00%	0
	Total	100%	1

Mathematics B.S., Program Review, Section 6

Program Outcome Student Learning Outcome D3 Forms

CAS Program Outcome Template

Please submit all data electronically via AAIR

Section I: Background Information

The Higher Learning Commission (HLC) defines assessment of student learning as a participatory, iterative process that: (1) Provides data/information you need on your students' learning, (2) Engages you and others in analyzing and using this data/information to confirm and improve teaching and learning, (3) Produces evidence that students are learning the outcomes you intended, (4) Guides you in making educational and institutional improvements, (5) Evaluates whether changes made improve/impact student learning, and (6) Documents the learning and your efforts.

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MACU Mission: Preparing students through a Wesleyan perspective to create, collaborate, and innovate to solve local and global problems for the glory of God through Jesus Christ and the good of society.

MACU WIGs: (1). MACU will "put F.E.A.T." to its student-centered services by achieving an annual 5% increase in the overall student satisfaction survey beginning 6/1/15 and ending 5/31/18. (F.E.A.T. = Friendly, Excellent, Accurate, and Timely). (2). MACU will take a "GiANT step" in developing a "Liberator" by starting five core groups each year over the next three years beginning 6/1/15 and ending 5/31/18.

School WIG: _ The School of Math and Science will increase question 14 average score on the End of Course Evaluations regarding the turn-around time for feedback on graded assignments in a timely manner from 90.5% to 95% by May 31, 2016

Section II: Participant Data

Program: Mathematics

Total Students in the Program: 15

Faculty/Chair: Carol Fowlkes

Email: cfowlkes@macu.edu

Report Date: 1/7/15

Semester/Year: Fall 2015

School Mission/Goals: The B.S. in Mathematics provides a comprehensive understanding of the nature of mathematics and its relation to the sciences, philosophy and other liberal arts. In addition to general education and Bible coursework, course topics include geometry, calculus, linear algebra, abstract algebra, statistics, differential equations and mathematical modeling to provide a foundation on which graduates may begin a career in teaching, applied mathematics and research or pursue graduate studies.

Section III: Outcome Data

1. List your Program and Student Learning Outcomes.

Outcome	List Program Outcome	List Student Learning Outcomes
Outcome 1	Knowledge of Mathematical Problem Solving	**Student Learning Outcome 1.1.** Students know, understand, and apply the process of mathematical problem solving
Outcome 2	Knowledge of Reasoning and Proof	**Student Learning Outcome 2.1.** Students reason, construct, and evaluate mathematical arguments and develop an appreciation for mathematical rigor and inquiry.
Outcome 3	Knowledge of Technology	**Student Learning Outcome 3.1.** Students embrace technology as an essential tool for learning mathematics
Outcome 4	Knowledge of Number and Operation	**Student Learning Outcome 4.1.** Students demonstrate computational proficiency, including a conceptual understanding of numbers, ways of representing number, relationships among number and number systems, and meanings of operations.
Outcome 5	Knowledge of Different Perspectives on Algebra	**Student Learning Outcome 5.1.** Candidates emphasize relationships among quantities including functions, ways of representing mathematical relationships, and the analysis of change.
Outcome 6	Knowledge of Geometries	**Student Learning Outcome 6.1.** Candidates use spatial visualization and geometric modeling to

		explore and analyze geometric shapes, structures, and their properties.
Outcome 7	Knowledge of Calculus	**Student Learning Outcome 7.1.** Candidates demonstrate a conceptual understanding of limit, continuity, differentiation, and integration and a thorough background in the techniques and application of the calculus.
Outcome 8	Knowledge of Discrete Mathematics	**Student Learning Outcome 8.1.** Candidates apply the fundamental ideas of discrete mathematics in the formulation and solution of problems.
Outcome 9	Knowledge of Data Analysis, Statistics, and Probability	**Student Learning Outcome 9.1.** Candidates demonstrate an understanding of concepts and practices related to data analysis, statistics, and probability.

2. Indicate which Program Outcomes were measured each semester (fall, spring) by marking **X** in appropriate cell.

Outcome	Fall 2014	Spring 2015	Fall 2015	Spring 2016	Fall 2016	Spring 2017	Fall 2017	Spring 2018	Fall 2018	Spring 2019
Outcome 1	x	x			x	x			x	x
Outcome 2	x	x			x	x			x	x
Outcome 3	x	x			x	x			x	x
Outcome 4			x	x			x	x		
Outcome 5	x	x			x	x			x	x
Outcome 6	x	x			x	x			x	x
Outcome 7			x	x			x	x		
Outcome 8			x				x			
Outcome 9			x	x			x	x		

Section IV: Data Analysis

1. Use the following 4-Point Scale Rubric below to indicate **number** of students in each category.

List Program and Student Outcomes Measured	1=Not Met	2=Need Improvement	3=Met	4=Exceed Expectations
Outcome 4.0: **Knowledge of Number and Operation**	0	0	1	7

Student Outcome 4.1: Students demonstrate computational proficiency, including a conceptual understanding of numbers, ways of representing number, relationships among number and number systems, and meanings of operations.				
Outcome 7.0: **Knowledge of Calculus** Student Outcome 7.1: Candidates demonstrate a conceptual understanding of limit, continuity, differentiation, and integration and a thorough background in the techniques and application of the calculus.	1	3	5	5
Outcome 8.0: **Knowledge of Discrete Math** Student Outcome 8.1: Candidates apply the fundamental ideas of discrete mathematics in the formulation and solution of problems	0	1	1	6
Outcome 9.0: **Knowledge of Data Analysis, Statistics, and Probability** Student Outcome 9.1: Candidates demonstrate an understanding of concepts and practices related to data analysis, statistics, and probability.	6	2	17	6

2. Identify the **percentage (%)** of students did not meet, need improvement, met, and/or exceed expectations for each program outcome measured per semester.

Percent (%) of Students Meet and/or Exceed Expectations			
Program Outcome	**Year**	**% Students Not Met and/or Need Improvement**	**% Students Met and/or Exceed Expectations**
Outcome 4.0: **Knowledge of Number and Operation**	Fall 2014		
	Sp. 2015		
	Fall 2015	0%	100%
	Sp. 2016		
	Fall 2016		
	Sp. 2017		
Outcome 7.0: **Knowledge of Calculus**	Fall 2014		
	Sp. 2015		
	Fall 2015	28.6%	71.4%
	Sp. 2016		
	Fall 2016		
Outcome 8.0: **Knowledge of Discrete Math**	Fall 2014		
	Sp. 2015		
	Fall 2015	12.5%	87.5%
	Sp. 2016		
Outcome 9.0: **Knowledge of Data Analysis, Statistics, and Probability**	Fall 2014		
	Sp. 2015		
	Fall 2015	25.8%	74.2%
	Sp. 2016		

Section V: Reports

1. How did you measure the program and student learning outcomes?

Program Outcome 4 was measured using one assessment tool: Final projects from Discrete Math where the students completed coding portfolios. These were 50 point assignments and students with less than 30 points were not met, between 30 and 34 were needs improvement, between 35 and 44 were met, and 45 or more were exceed expectations.

Program Outcome 7 was measured with 3 assessment tools: Final Exam grade in Calculus I, Final Exam grade in Calculus 3, and Shadow Box Lab from Calculus 1. Below 60% was not met, between 60% and 69% was needs improvement, between 70% and 89% was met, and 90% or better was exceeds expectations on the final exams and lab.

Program Outcome 8 was measured with 1 assessment tool: Final Exam grade in Discrete Math. Below 60% was not met, between 60% and 69% was needs improvement, between 70% and 89% was met, and 90% or better was exceeds expectations on the final exams and lab.

Program Outcome 9 was measured with 5 assessment tools: Final Project (hypothesis test) in Introduction to Statistics, Final project (multiple regression) in Mathematical Statistics, Analysis of spread and center exam in Introduction to Statistics, Analysis of Spread and Center Exam in Mathematical Statistics, and Confidence Interval Exam in Introduction to Statistics.

2. What were the major findings?

Program Outcome 7 Knowledge of Calculus had the lowest percent of students that met expectations. This was surprising since these are the foundational courses for all math majors. We must find a way to increase this percent. One of the factors leading to the low percent was one student that was transferring to another school and had given up on math as a major and did not show his best effort on the final exam.

Program Outcome 4 Knowledge of Number and Operation showed 100% of the students meeting expectations which shows we are successful in this area and need to continue utilizing this success.

3. What steps are you planning to take to improve student learning outcomes?

In Calculus 1, only 50% of the students met expectations on the final comprehensive exam. In Calculus III, 66.7% of the students met expectations on the final comprehensive exam. It appears based on chapter tests that the professors might be trying to cram too much in after Thanksgiving break. Next fall professors will attempt to give another chapter test and then review for two days rather than one day for the final comprehensive exam. The review will be utilizing best practices. The students appear to be learning the information as shown by chapter tests, but when they have to put it all together for the final comprehensive exam, the task becomes more difficult.

CAS Program Outcome Template

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Faculty/Chair: Carol Fowlkes

Email: cfowlkes@macu.edu

Report Date: 5/30/16

Semester/Year: Spring 2016

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Section III: Outcome Data

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Outcome 6	Knowledge of Geometries	**Student Learning Outcome 6.1.** Candidates use spatial visualization and geometric modeling to

		explore and analyze geometric shapes, structures, and their properties.
Outcome 7	Knowledge of Calculus	**Student Learning Outcome 7.1.** Candidates demonstrate a conceptual understanding of limit, continuity, differentiation, and integration and a thorough background in the techniques and application of the calculus.
Outcome 8	Knowledge of Discrete Mathematics	**Student Learning Outcome 8.1.** Candidates apply the fundamental ideas of discrete mathematics in the formulation and solution of problems.
Outcome 9	Knowledge of Data Analysis, Statistics, and Probability	**Student Learning Outcome 9.1.** Candidates demonstrate an understanding of concepts and practices related to data analysis, statistics, and probability.

2. Indicate which Program Outcomes were measured each semester (fall, spring) by marking **X** in appropriate cell.

Outcome	Fall 2014	Spring 2015	Fall 2015	Spring 2016	Fall 2016	Spring 2017	Fall 2017	Spring 2018	Fall 2018	Spring 2019
Outcome 1	x	x			x	x			x	x
Outcome 2	x	x			x	x			x	x
Outcome 3	x	x			x	x			x	x
Outcome 4			x	x			x	x		
Outcome 5	x	x			x	x			x	x
Outcome 6	x	x			x	x			x	x
Outcome 7			x	x			x	x		
Outcome 8			x				x			
Outcome 9			x	x			x	x		

Section IV: Data Analysis

1. Use the following 4-Point Scale Rubric below to indicate **number** of students in each category.

List Program and Student Outcomes Measured	1=Not Met	2=Need Improvement	3=Met	4=Exceed Expectations
Outcome 4.0: **Knowledge of Number and Operation**	1	2	3	3

Student Outcome 4.1: Students demonstrate computational proficiency, including a conceptual understanding of numbers, ways of representing number, relationships among number and number systems, and meanings of operations.				
Outcome 7.0: **Knowledge of Calculus** Student Outcome 7.1: Candidates demonstrate a conceptual understanding of limit, continuity, differentiation, and integration and a thorough background in the techniques and application of the calculus.	0	1	1	1
Outcome 9.0: **Knowledge of Data Analysis, Statistics, and Probability** Student Outcome 9.1: Candidates demonstrate an understanding of concepts and practices related to data analysis, statistics, and probability.	10	4	16	30

2. Identify the **percentage (%)** of students did not meet, need improvement, met, and/or exceed expectations for each program outcome measured per semester.

Percent (%) of Students Meet and/or Exceed Expectations			
Program Outcome	**Year**	**% Students Not Met and/or Need Improvement**	**% Students Met and/or Exceed Expectations**
	Fall 2014		

Outcome 4.0: **Knowledge of Number and Operation**	Sp. 2015		
	Fall 2015	0%	100%
	Sp. 2016	33%	67%
	Fall 2016		
	Sp. 2017		
Outcome 7.0: **Knowledge of Calculus**	Fall 2014		
	Sp. 2015		
	Fall 2015	28.6%	71.4%
	Sp. 2016	33%	67%
	Fall 2016		
Outcome 9.0: **Knowledge of Data Analysis, Statistics, and Probability**	Fall 2014		
	Sp. 2015		
	Fall 2015	25.8%	74.2%
	Sp. 2016	23%	77%

Section V: Reports

1. How did you measure the program and student learning outcomes?

Program Outcome 4 was measured using two assessment tools: The first assessment tool was the average of 4 tests given in Abstract Algebra. Averages less than 60% did not meet expectations, averages between 60% and 70% were needs improvement, averages between 70% and 90% were met expectations, and averages more than 90% were exceeds expectations. The second assessment tool was the final exam score for Linear Algebra. Scores less than 60% did not meet expectations, scores between 60% and 70% were needs improvement, scores between 70% and 90% were met expectations, and scores more than 90% were exceeds expectations.

Program Outcome 7 was measured with 1 assessment tools: Average of 4 tests given over the semester in Calculus II. Below 60% was not met, between 60% and 69% was needs improvement, between 70% and 89% was met, and 90% or better was exceeds expectations on the exams.

Program Outcome 9 was measured with 3 assessment tools: Final Project (hypothesis test) in Introduction to Statistics, Analysis of spread and center exam in Introduction to Statistics, and Confidence Interval Exam in Introduction to Statistics. Below 60% was not met, between 60% and 69% was needs improvement, between 70% and 89% was met, and 90% or better was exceeds expectations on the exams and final project.

2. What were the major findings?

Program Outcome 4 Knowledge of Number and Operation showed only 67% of the students meeting or exceeding expectations which was less than the 100% in the previous semester. One of the hardest courses for math majors was assessed in this semester and there was a student that really struggled with the theory part of this course. He was encouraged to go see the professor for extra help and get tutoring. This was also a low-enrollment course. The assessment of Linear Algebra showed that many students need improvement on their final exam scores.

Program Outcome 7 Knowledge of Calculus showed a drop in the students that met/exceeded expectations from the previous semester. The number of calculus students being assessed also dropped since Calculus II is the only course offered in the spring that meets this program outcome.

3. What steps are you planning to take to improve student learning outcomes?

Next spring professors in Calculus 2 will review for two days rather than one day for the final comprehensive exam. The review will be utilizing best practices. The students appear to be learning the information as shown by chapter tests, but when they have to put it all together for the final comprehensive exam, the task becomes more difficult.

4. Provide evidence documents supporting your measurement, findings, and plan of action for improvement.

Refer to Question 1 and 3.

College-School (i.e. CAS/Calculus II):
Chair's Name:

Program Outcome/Student Learning Outcome D3 Form

Semester	Report Date	Areas of Focus	Action Plan	Timeline	Anticipated Results	Actual Results	Evidence Files
Fall 2016	12/21/2016	Improving student attendance	Make sure all syllabi have a reward for missing less than 3 and a "punishment" to be determined by department members for missing more than two weeks worth of classes	Spring 2017	Grades are improved	Attendance was much better in the spring and therefore grades were reflective of this area of focus.	

Spring 2017	5/25/2017	PO3: Knowledge of Technology: Students embrace technology as an essential tool for learning mathematics	This outcome is assessed in Linear Algebra and Introduction to Statistics final project. In Linear Algebra the online web software did not work this year and therefore I had to use MIT's Scratch software and only 2 students turned it in because I made it bonus rather than an assignment. I will make it required and teach the coding required to make the application to Linear Algebra.	Spring 2018	The goal is that 100% will utilize the coding language utilizing Scratch software and embrace this technology as an essential tool for learning mathematics and its application to Linear Algebra	Technology was much improved for this academic year however, Program outcome 3 was not assessed this year	

Spring 2017	5/25/2017	PO5: Knowledge of different perspectives of Algebra: Students emphasize relationships among quantities including functions, way of representing mathematical relationships, and the analysis of change.	SO5.2 The student will apply fundamental ideas of linear algebra was not met this semester with 3 out of 4 not meeting expectations. This was assessed on the final comprehensive exam. The students showed knowledge on chapter tests but did not display this knowledge at the comprehensive final. Therefore, an effort will be made to continually reteach and refresh and refer back to prior knowledge as progress is made through the semester.	Spring 2018		For Calculus especially, final exam scores were much improved. More time was spent on studying for the final exam and study groups were encouraged and used.	
Fall 17/Spring 18	5/22/2018	PO4: Knowledge of Number and Operation SLO 4.2 The student will recognize matrices and vectors as systems that have some of the properties of the real number system. This was assessed in MATH 3103 Linear Algebra on their final exam.	Spend two days reviewing exclusively for final exam offering study groups with the professor	Spring 2019	100% of the students meet expectations on SLO 4.2		

Fall 17/Spring 18	5/23/2018	PO7: Knowledge of Calculus 78% of students met/exceed expectations.	On lab days for both Calculus I and Calculus II, more time will be spent on fundamentals of calculus and review (derivatives, integrals) as well as their application.	Spring 2019	100% of the students meet expectations on PO7		
Fall 17/Spring 18	5/23/2018	PO9: Knowledge of Data Analysis, Statistics, and probability 78% of students met/exceed expectations. SLO 9.2 The student will use appropriate statistical methods and technological tools to describe shape and analyze spread and center. This outcome was the lowest of the SLO's for Program outcome 9. 8% (1/13) needed improvement. This was assessed in both the Introduction to Statistics course as well as the Mathematical Statistics course.	In the Mathematical Statistics course more time will be spent on spread and center and it's application to higher level statistics courses. Expected values will be emphasized in one variable so that the application to multivariate becomes easier	Spring 2019	100% of the students meet expectations on SLO 9.2		

Mathematics B.S., Program Review, Section 7

End of Course D3 Forms

College-School (i.e. CAS/Calculu School of Math and Science
Chair's Name: Carol Fowlkes

End of Course D3 Form

Semester	Report Date	Areas of Focus	Action Plan	Timeline	Anticipated Results	Actual Results	Evidence Files
fall 2016	12/21/2016	Q9 integrating technology	There is one professor who does not like to use technology so I will work with him to have him implement one new technology per semester into the lecture	1/5-5/16	This will not be the bottom score on EOC and will be above 3.0	Q9 was not the bottom but the average still did not improve. It went from 3.71 to 3.69 which was not a significant decrease.	
Spring 2017	5/23/2017	Q6 returning materials in a timely manner	In the 15-16 academic year we had made this question the focus of our WIG. In the 17-18 school year we will return and add this to our School WIG and inform all instructors, including adjunct the focus of the year.	8/17-5/18	Currently Q6 is the lowest in the school with an average of 3.6. Our goal is to improve this score to a 3.7 or better.	The average was a 3.302 for spring 2018 and 3.725 for Fall 2017 for an overall average for the academic year of 3.505	

Fall 2017	5/22/2018	Q10 The organization of the course was conducive to learning. The average on this question was 3.029					
Spring 2018	5/22/2018	Q10 The organization of the course was conducive to learning. The average on this question was 3.029	This was our lowest question average for the spring 2018 semester. The comments reflected that sometimes our adjuncts do not seem prepared. We will make it a focus of showing these results to all professors in the SMS and to tell them that organization of the course is going to be our goal for the upcoming academic year.	8/20/2018-5/10/2019	To raise this score from a 3.029 to 3.5 by May 2019		

Mathematics B.S., Program Review, Section 8

End of Course Evidence

Number of Responses per Course	Enrollment	Month	Course	Course Description	Q1_1	Q2_1	Q3_1	Q4_1	Q5_1	Q6_1	Q7_1	Q8_1	Q9_1	Q10_1	Q11_1	Q12_1	Q13_1	Q14_1	Q15	Q16	Q17	Q18
8	11	FALL 2015	MATH 0103 1 15FA	Basic Math	4	4	4	4	4	4	4	4	4	4	4	4	4	4	very understanding	goes over the topic till you understand it.		
8	11	FALL 2015	MATH 0103 1 15FA	Basic Math	3	3	3	3	3	3	3	3	3	3	3	3	3	3	NO weaknesses but strength gives us all the info we need	Answers all our questions [illegible] and challenges us to do better or get better	Nothing at all keep doing what she is doing	
8	11	FALL 2015	MATH 0103 1 15FA	Basic Math	4	4	4	4	4	3	3	4	3	3	4	4	4	4	Strengths- Understanding the Questions Weakness- way to long of a class	Teaching the subject to where everyone understands	She is perfectly fine	
8	11	FALL 2015	MATH 0103 1 15FA	Basic Math	4	4	4	4	4	4	4	4	4	4	4	4	4	4	Strengths: questions get answered Weakness: long class	doesn't get mad when questions are asked	It's all good.	
8	11	FALL 2015	MATH 0103 1 15FA	Basic Math	4	4	4	4	4	4	4	4	4	4	4	4	4	4	strengths; good amount of math, easy to comprehend.	She makes sure we understand before moving on		I like this class.
8	11	FALL 2015	MATH 0103 1 15FA	Basic Math	4	4	4	4	4	4	4	4	4	4	4	4	4	4	Very understanding; answers questions. Class is too long.	Doesn't get mad when we have a lot of questions.	Not hover so much.	
8	11	FALL 2015	MATH 0103 1 15FA	Basic Math	4	3	4	4	4	4	4	4	4	4	4	4	4	4	I feel like this is a review class. And its very helpful	She goes through the work fast and I find her helpful	Hover less, speak loudly	This class is too long- We can go through two sections and do some homework.
8	11	FALL 2015	MATH 0103 1 15FA	Basic Math	4	4	4	4	4	4	4	4	4	4	4	4	4	4	Very understanding when she teaches, makes the lessons easy to understand; I don't think there's any weaknesses	Great math teacher	I think she is great!	
6	9	FALL 2015	MATH 3703 1 15FA	Introduction to Statistics	3	3	3	3	3	3	3	3	3	3	3	3	3	3	The teacher is very helpful and helps you if you are willing to put the effort, sometimes it is hard to understand the subject.			
6	9	FALL 2015	MATH 3703 1 15FA	Introduction to Statistics	3	2	3	3	4		3	4	3	3	2	3	3	4	strengths are she knows what she's talking about, very knowledgeable Weaknesses- she went to fast. It was hard to keep up.	Strengths are she is knowledgable about stats and she grades everything in time.		
6	9	FALL 2015	MATH 3703 1 15FA	Introduction to Statistics	3	3	3	3	3	3	3	3	3	3	3	3	3	3	N/A	N/A	N/A	N/A
6	9	FALL 2015	MATH 3703 1 15FA	Introduction to Statistics	3	3	3	3	3	3	3	3	3	3	3	3	3	3			Don't teach one lesson while another homework assignment is due.	
6	9	FALL 2015	MATH 3703 1 15FA	Introduction to Statistics	3	3	3	3	3	3	3	3	3	3	3	3	3	3	Dealing w/ math	explains good	more details about HW	
6	9	FALL 2015	MATH 3703 1 15FA	Introduction to Statistics	3	3	3	3	3	3	3	3	3	3	3	3	3	3	The strengths are knowing that the teacher knows what she is doing. Weakness is that it's a really hard course	She is well knowledge and nice	Maybe take things a little slower	
9	13	FALL 2015	MATH 2103 1 15FA	Algebra for Teachers	4	4	4	4	4	4	4	4	4	4	4	4	4	4	Great Instructor Fun class	Very funny knowledgeable		
9	13	FALL 2015	MATH 2103 1 15FA	Algebra for Teachers	4	4	4	4	4	4	4	4	4	4	4	4	4	4	NO weaknesses but strength gives us all the info we need	He's awesome	A++++++	
9	13	FALL 2015	MATH 2103 1 15FA	Algebra for Teachers	4	4	4	4	4	4	4	4	4	4	4	4	4	4	there is no need for Early Childhood Development studdents to take this	great communication skills & is just a phenomenal teacher	N/A	We need more professors like DeCarlo!
9	13	FALL 2015	MATH 2103 1 15FA	Algebra for Teachers	4	4	4	4	4	4	4	4	4	4	4	4	4	4	He's	awesome!		We need more teachers like him.
9	13	FALL 2015	MATH 2103 1 15FA	Algebra for Teachers	4	4	4	4	4	4	4	4	4	4	4	4	4	4	The best math teacher ever	Thank you	Boom!Boom! Goes the Dynomite!	I'm ready for Christmas
9	13	FALL 2015	MATH 2103 1 15FA	Algebra for Teachers	4	4	4	4	4	4	4	4	4	4	4	4	4	4	This class is awesome and covers that material in a timely makes sense fashion	He is kind, understanding and willing to work with students	Nothing	
9	13	FALL 2015	MATH 2103 1 15FA	Algebra for Teachers	4	3	4	4	3	4	4	3	3	3	3	3	3	3	Weaknesses- some of the things we learn I will never use as an Early Childhood Teacher.	If I ever had a question, he would help me as much as he could. He cares about his students.		
9	13	FALL 2015	MATH 2103 1 15FA	Algebra for Teachers	4	4	4	4	4	4	4	4	4	4	4	4	4	4	the course reinforce other math courses & prepares you to be able to teach math	The instructor is highly skilled & has an exceptional delivery style that make the material retainable	Hire more of him	
9	13	FALL 2015	MATH 2103 1 15FA	Algebra for Teachers	4	4	4	4	4	4	4	4	4	4	4	4	4	4	The strenghts of the course is that we truly learn what & why we need to know certain things when we teach. No weaknesses.	The strengths are thathe is always prepared & knows how to teach math.	N/A	Great teacher! Learned a lot. Enjoyed his class as well.

2	13	FALL 2015	MATH 2303 1 15FA	Math for Teachers II	4	4	4	4	4	4	4	4	4	4	4	4	4	4	I thought that he really helped me understand and like Math. The material was easy to understand.	Made things easy and understandable. Made math fun and not boring.	I thought everything was great other that the 3 classroom changes, but that wasn't his fault.	I really appreciated how he did the lessons, made class fun and the way in which the material was presented. One of the best math teachers I've ever had.
2	13	FALL 2015	MATH 2303 1 15FA	Math for Teachers II	3	3	3	3	3	3	3	3	3	3	3	3	3	3	he was very engaged with the classroom/classroom never felt boring	engaging, not constantly giving us information	Just teach more than once a week.	The class should be taught more than one day a week. It hard to keep geometry in your memory with just one day.
28	36	FALL 2015	MATH 1103 1 15FA	College Math	4	4	4	4	4	4	4	4	4	4	4	4	4	4	I hate math so I have nothing positive to say about this course.	Coach Duke is awesome. He holds counseling every Wednesday for those us who are struggling in math. He helps us to understand and he's very patient.	Coach Duke is awesome, no complaints	
28	36	FALL 2015	MATH 1103 1 15FA	College Math	4	4	4	4	4	4	4	4	4	4	4	4	4	4	Strengths- Math Weaknesses- fractions	He explains the material well.	He is already doing well.	
28	36	FALL 2015	MATH 1103 1 15FA	College Math	4	4	4	4	4	4	4	4	4	4	4	4	4	4	Strengths Weaknesses-a lot of homework	explains well, speaks loud	use the screens so we can see on each side.	
28	36	FALL 2015	MATH 1103 1 15FA	College Math	4	4	4	4	3	3	4	4	4	3	4	4	4	4	strength not trying to do a lot online	He does a great job of helping students understand.		I really enjoyed this class and Dukes I would take another class being taught by him.
28	36	FALL 2015	MATH 1103 1 15FA	College Math	4	4	4	4	4	4	3	4	4	3	4	3	4	4	strengths the instructor makes sure that we understand the material. Weakness not everybody participates.	He knows what he is talking about, & well organized		
28	36	FALL 2015	MATH 1103 1 15FA	College Math	4	4	4	4	4	4	4	4	4	4	4	4	4	4	I learned math.	He's one of my favorite professors ever because I don't like math & he made it bearable. He was so so willing to go out of his way to help students succeed & really understand the material. He put forth the effort to learn student names & he was just spectacular.	Not enough funny jokes. Maybe position the whiteboard a little differently so more people can see it.	
28	36	FALL 2015	MATH 1103 1 15FA	College Math	4	4	4	4	4	4	4	4	4	4	4	4	4	4	The class is very adaptable to individual pace.	He cares about the students and wants us to succeed.	continue teaching	
28	36	FALL 2015	MATH 1103 1 15FA	College Math	4	4	4	4	4	4	4	4	4	4	4	4	4	4	I have learned many things that I have not remembered or seen since early in high school.	The instructor is willing to tutor and provides study sessions very week.		
28	36	FALL 2015	MATH 1103 1 15FA	College Math	3	3	3	3	3	4	4	4	3	3	3	3	3	3	Already know the stuff	He knows what he is teaching	Teach the class more and not just himself	
28	36	FALL 2015	MATH 1103 1 15FA	College Math	4	4	4	4	4	4	4	4	4	4	4	4	4	4	This is a very strong course	He knows the subject, and is willing to take time out of his own time to help students	none	He should train other instructors here.
28	36	FALL 2015	MATH 1103 1 15FA	College Math	4	4	4	4	4	4	4	4	4	4	4	4	4	4	H try to help everyone who is having problems no weaknesses	He is really nice	N/A	N/A
28	36	FALL 2015	MATH 1103 1 15FA	College Math	4	4	4	4	4	4	4	4	4	4	4	4	4	4	strengths would be comprehension of the material	Amazing attitude and motivation to teach	N/A	Great semester!
28	36	FALL 2015	MATH 1103 1 15FA	College Math	4	4	4	4	4	4	4	4	4	4	4	4	4	4	Not a single weakness	he went above and beyone what he needed to do and cares for his students more than other instructors He will gladly meet with students to help them on his own time		
28	36	FALL 2015	MATH 1103 1 15FA	College Math	4	4	4	4	4	4	4	4	4	4	4	4	4	4		He is personable	He works part of some problems in his head, leaving a few students confused	
28	36	FALL 2015	MATH 1103 1 15FA	College Math	3	3	3	3	3	3	3	3	3	3	3	3	3	3	Math is the weakness	he knows exactly what he is doing	less math. More TACO's	I REALLY DON'T LIKE SPIDERS.
28	36	FALL 2015	MATH 1103 1 15FA	College Math	3	3	3	3	3	3	3	3	3	3	3	3	3	3	It was a lot to cover and you get threw it, just it seems to be repetitive	know his stuff	be more involving	none
28	36	FALL 2015	MATH 1103 1 15FA	College Math	4	4	4	4	4	4	4	4	4	4	4	4	4	4	great teacher and no weakness	great at teaching the course and can understand everything	none	none
28	36	FALL 2015	MATH 1103 1 15FA	College Math	3	2		3	3	3	3	3	2	2	2	3	3	3	N/A	N/A	slow done just a little	N/A
28	36	FALL 2015	MATH 1103 1 15FA	College Math	3	3	3	3	3	3	4	4	4	3	3	4	4	4	length to cover material but feels rushed	lots of examples	slow down at times, offer more tutoring	

28	36	FALL 2015 MATH 1103 1 15FA	College Math	4	4	4	4	4	4	4	4	4	4	4	4	4	4	sometimes can't see board; gets to the point	explains material well	talk louder	
28	36	FALL 2015 MATH 1103 1 15FA	College Math	4	4	4	3	4	4	4	4	4	4	3	4	4	4	I don't do all my homework	he gives us time	he is doing good	
28	36	FALL 2015 MATH 1103 1 15FA	College Math	3	3	2	3	2	2	3	3	4	2	3	2	2	2	The class is easy, but not interesting	very good at one on one work	Shut the students up	Not bad...
28	36	FALL 2015 MATH 1103 1 15FA	College Math	4	4	4	4	4	4	4	4	4	4	4	4	4	4	strengths; he does a good job teaching. Weaknesses-he goes to fast in teaching the subject	He teaches with confident & teaches to where we can learn.	Interact with students more	
28	36	FALL 2015 MATH 1103 1 15FA	College Math	4	4	4	4	4	4	4	4	4	4	4	4	4	4	Explains well	Teaches good	N/A	N/A
28	36	FALL 2015 MATH 1103 1 15FA	College Math	3	3	3	3	3	3	3	3	3	3	3	3	3	3	nothing	nothing I don't know		
28	36	FALL 2015 MATH 1103 1 15FA	College Math	4	4	4	4	4	4	4	4	4	4	4	4	4	4				
28	36	FALL 2015 MATH 1103 1 15FA	College Math	4	4	4	4	4	4	4	4	4	4	4	4	4	4				
28	36	FALL 2015 MATH 1103 1 15FA	College Math	4	3	4	3	4	3	4	4	3	3	4	4	3	4	strength-easy material; weakness-speed	math genius	stop teaching at light speed	
1	1	FALL 2015 MATH 1303 1 15FA	Plane Trigonometry	4	4	4	4	4	4	4	4	4	4	4	4	4	4		he always tryes to help and he always goes over everything you need until you understand		he is a great teacher.
6	9	FALL 2015 MATH 1513 1 15FA	College Algebra	3	3	3	3	3	3	3	3	3	2	2	3	3	3	Course is ok just could move a little slower due to lack of class time in the beginning	instructor is well organized and knowledgable of math	slow down a little and focus on one objective at a time	was a good class just want a little to fast
6	9	FALL 2015 MATH 1513 1 15FA	College Algebra	4	3	3	3	3	4	3	4	3	1	2	3	4	4	strengths: time of class weakness: the subject	knows the material	Paying more attention to students who have questions.	
6	9	FALL 2015 MATH 1513 1 15FA	College Algebra	4	4	4	4	4	4	4	4	4	4	4	4	4	4	strength- clearly explains problems; weakness-	strength- super sweet and wise	stand to the side of the board when writing	Best Proffessor Ever!
6	9	FALL 2015 MATH 1513 1 15FA	College Algebra	3	3	3	3	3	3	3	3	3	2	3	3	3	3		works to make knowledge obtainable to all students	More classroom participation. Perhaps he could have students work problems out on the board	
6	9	FALL 2015 MATH 1513 1 15FA	College Algebra	4	4	4	4	3	3	4	4	2	1	3	2	3	3		Puts students first and makes math fun		Helped me understand math for the first time
6	9	FALL 2015 MATH 1513 1 15FA	College Algebra	4	4	4	3	3	3	3	4	3	1	1	3	4	4	He fully understands the subject and he is patient	To get students more involved and slow down.		
3	5	FALL 2015 MATH 2114 1 15FA	Calculus I and Analytic Geometry	4	4	4	4	4	2	4	4	3	4	3	4	4	4	With all homework being online, makes it hard to grasp for me personally compared to more tangable homework because tangable homework forces Professor approach. Strengths- notes online, Instructor compassion!!!	The instructor cares!	Maybe make like 1/3 of homework more tangable.	You're (Awesome)2 Dr. Fowlkes! The actual textbook for the course itself should maybe be more understandable.
3	5	FALL 2015 MATH 2114 1 15FA	Calculus I and Analytic Geometry	4	4	4	3	4	3	4	4	4	3	4	3	3	3	Strengths; Really learned calculus and how to better my understanding of the subject.	She can teach anyone calculus.	More grades than just tests.	This tests grade was too much. So if you didn't do well on the test your grade suffered. Maybe throw in something to help.
3	5	FALL 2015 MATH 2114 1 15FA	Calculus I and Analytic Geometry	4	4	4	4	4	3	4	4	3	3	3	4	3	3	She does a great job of breaking everything down where we can understand. She is also always available to help however we need.	She teaches the material very well. Always ask to call or text for help. Very caring and wants you to do well.	Nothing comes to mind.	
4	7	FALL 2015 MATH 2313 1 15FA	Calculus III	4	4	4	4	4	4	4	4	4	4	4	4	4	3	Professor always ready to help in any way possible	Professor always ready to help in any way possible	Not possible! My favorite professor BY FAR	
4	7	FALL 2015 MATH 2313 1 15FA	Calculus III	4	4	4	4	4	4	4	4	4	4	4	4	4	4	Strength- Explained & Taught well! Weakness- not enough time to cover all.	Completes grading quickly	She is Great	
4	7	FALL 2015 MATH 2313 1 15FA	Calculus III	4	4	4	4	4	4	4	4	4	4	4	4	4	4	She is a wonderful professor and godly woman. I have been through a lot this year and she has been by my side the whole way. I could not have made it without her. Weakness: More class projects.	She is a wonderful professor and godly woman. I have been through a lot this year and she has been by my side the whole way. I could not have made it without her.		
4	7	FALL 2015 MATH 2313 1 15FA	Calculus III	4	4	4	4	4	4	4	4	4	4	4	4	4	4		Explains clearly- paces the class well; Always available to meet		
5	9	FALL 2015 MATH 3403 1 15FA	Discrete Math	4	4	4	4	4	4	4	4	4	4	4	4	4	4		knowledgable over material & presents well		
5	9	FALL 2015 MATH 3403 1 15FA	Discrete Math	4	4	4	4	4	4	4	4	4	4	4	4	4	4				
5	9	FALL 2015 MATH 3403 1 15FA	Discrete Math	4	4	4	4	4	4	4	4	4	4	4	4	4	4		Teaching	less homework	

5	9	FALL 2015	MATH 3403 1 15FA	Discrete Math	4	4	4	4	4	4	4	4	4	4	4	4	4	4	She's great	Good at explaining and being there when we need her		
5	9	FALL 2015	MATH 3403 1 15FA	Discrete Math	4	4	4	4	4	4	4	4	4	4	4	4	4	4	Enjoying this class	Explains info well		
3	6	FALL 2015	MATH 4203 1 15FA	Mathematical Statistics	4	4	4	4	4	4	4	4	4	4	4	4	4	3		knowledgeable and knows how to teach material well		
3	6	FALL 2015	MATH 4203 1 15FA	Mathematical Statistics	4	4	4	4	4	3	4	4	4	4	4	4	4	4	N/A	Everything, perfectly	N/A	
3	6	FALL 2015	MATH 4203 1 15FA	Mathematical Statistics	4	4	4	4	4	4	4	4	4	4	4	4	4	4		Tests are being returned in a timely manner! Explains information well. Went fast at first, but slowed down.		
17	20	FALL 2015	NATS 2201 1 15FA	Biology Lab	4	4	4	4	4	4	4	4	4	4	4	4	4	4	We do cool & exciting things in our labs	She's super nice and always helpful	nothing!	
17	20	FALL 2015	NATS 2201 1 15FA	Biology Lab	3	3	3	4	3	3	4	4	4	3	4	4	4	4	Fun experiments	Good instruction		
17	20	FALL 2015	NATS 2201 1 15FA	Biology Lab	3	3	3	3	3	3	3	3	3	3	3	3	3	3	N/A	N/A	N/A	N/A
17	20	FALL 2015	NATS 2201 1 15FA	Biology Lab	4	4	4	4	4	4	4	4	4	4	4	4	4	4	Informative	Prepared, helpful, knowledgeable in the subject matter		
17	20	FALL 2015	NATS 2201 1 15FA	Biology Lab	4	4	4	4	4	4	4	4	4	4	4	4	4	4	SCIENCE	Lovely lady	N/A	accompani
17	20	FALL 2015	NATS 2201 1 15FA	Biology Lab	4	4	4	4	4	4	4	4	4	4	4	4	4	4	N/A	N/A	N/A	N/A
17	20	FALL 2015	NATS 2201 1 15FA	Biology Lab	4	4	4	4	4	4	4	4	4	4	4	4	4	4	She is very knowleable of subject/ and we learn from experiment. No weakness	She know her stuff	none	*WSOME Class
17	20	FALL 2015	NATS 2201 1 15FA	Biology Lab	4	4	4	4	4	4	4	4	4	4	4	4	4	4	Very engaging	Very well instructing.		
17	20	FALL 2015	NATS 2201 1 15FA	Biology Lab	4	4	4	4	4	4	4	4	4	4	4	4	4	4	Very informative. Dissecting was great along w/ all labs.	very knowledgeable of subject	N/A	
17	20	FALL 2015	NATS 2201 1 15FA	Biology Lab	4	4	4	4	4	4	4	4	4	4	4	4	4	4	provided great info. Got class involved	great info got class involved	N/A	N/A
17	20	FALL 2015	NATS 2201 1 15FA	Biology Lab	4	4	4	4	4	4	4	4	4	4	4	4	4	4	Learning was fun	She made it interesting		
17	20	FALL 2015	NATS 2201 1 15FA	Biology Lab	4	4	4	4	4	4	4	4	4	4	4	4	4	4				Great course
17	20	FALL 2015	NATS 2201 1 15FA	Biology Lab	4	4	4	4	4	4	4	4	4	4	4	4	4	4	Very hands on. Love it! It's super late.	She good at keeping us interested	She does really well!	
17	20	FALL 2015	NATS 2201 1 15FA	Biology Lab	4	4	4	4	4	4	4	4	4	4	4	4	4	4	All really cool activities	Always made sure we aren't confused on answers	N/A	N/A
17	20	FALL 2015	NATS 2201 1 15FA	Biology Lab	4	4	4	4	4	4	4	4	4	4	4	4	4	4	Great class	She knows how to teach!	N/A	N/A
17	20	FALL 2015	NATS 2201 1 15FA	Biology Lab	4	3		3	3	4	4	4	3		2	4	3	2	Strength- not a whole lot of busy work; weak-too long	ontime	make lectures shorter	
17	20	FALL 2015	NATS 2201 1 15FA	Biology Lab	4	4	4	4	4	4	4	4	4	4	4	4	4	4	It is fun	Good instruction	She's awesome	
21	26	FALL 2015	NATS 2203 1 15FA	Biology	3	3	3	3	3	3	3	3	3	3	3	3	3	3	read off slides(w) all information presented clearly!!	very through	make more interesting	n/a
21	26	FALL 2015	NATS 2203 1 15FA	Biology	4	4	4	4	4	4	4	4	4	4	4	4	4	4		friendly, can keep the class focused & interested	not read straight from the powerpoint.	
21	26	FALL 2015	NATS 2203 1 15FA	Biology	3	3	3	3	3	3	3	3	3	3	3	3	3	3	My arms are the strongest	her arms	Tell in more of an explaining manner	*ou're hot
21	26	FALL 2015	NATS 2201 1 15FA	Biology	4	4	4	4	4	4	4	4	4	4	4	4	4	4	a little slow	him intelligible, things thoroughly explained	less boring assignments	
21	26	FALL 2015	NATS 2203 1 15FA	Biology	4	4	4	4	4	4	4	4	4	4	4	4	4	4	Its all good	shes great	do not change	none
21	26	FALL 2015	NATS 2203 1 15FA	Biology	4	4	4	4	4	4	4	4	4	4	2	4	4	4			slow down some when lecturing	
21	26	FALL 2015	NATS 2203 1 15FA	Biology	4	4	4	4	4	3	4	4	4	4	4	4	4	4	I learned a lot from this class	knows her stuff	Make things more exciting	
21	26	FALL 2015	NATS 2203 1 15FA	Biology	4	3	3	3	3	3	3	3	3	3	3	3	3	3	Loads of information; sometimes hard to take it all in.	She is very knowledgable about her field and is good at explaining anything we have questions over.	more hands-on interaction	
21	26	FALL 2015	NATS 2201 1 15FA	Biology	4	4	4	4	4	4	4	4	4	4	4	4	4	4	great work showed great information	provided information needed	N/A	N/A
21	26	FALL 2015	NATS 2201 1 15FA	Biology	4	4	4	4	4	4	4	4	4	4	4	4	4	4	N/A	n/a	N/A	n/a
21	26	FALL 2015	NATS 2203 1 15FA	Biology	4	4	4	4	4	4	4	4	4	4	4	4	4	4	Great class	She knows how to teach the material	N/A	N/A
21	26	FALL 2015	NATS 2203 1 15FA	Biology	4	4	4	4	4	4	4	4	4	4	4	4	4	4				
21	26	FALL 2015	NATS 2203 1 15FA	Biology	4	4	4	4	4	4	4	4	4	4	4	4	4	4	Strength: everything	She is a great teacher!	She doesn't have to do anything else!	
21	26	FALL 2015	NATS 2203 1 15FA	Biology	4	3	3	3	3	3	3	3	3	3	3	3	3	3	strengths-learn the stuff; weaknesses- long talks, hard to pay attention	good teaching skills	less info in each class in order to remember/learn it all	
21	26	FALL 2015	NATS 2203 1 15FA	Biology	4	4	3		4	3	3	4	4	4	3	4	4	3	Too long but good info	very personable	maybe if she made it a little more relatable?	
21	26	FALL 2015	NATS 2203 1 15FA	Biology	4	3	3	4	4	4	4	4	4	4	4	4	4	4		very knowledgable	Not directly reading off the powerpoint.	
21	26	FALL 2015	NATS 2203 1 15FA	Biology	3	3	3	3	3	3	3	3	3	3	3	3	3	3	prepared for class; just read off of slides	Funny, easy going	have shorter classes	
21	26	FALL 2015	NATS 2203 1 15FA	Biology	4	4	4	4	4	4	4	4	4	4	4	4	4	4	Great information of the study of Biology.	very knowledgeable about subject matter. Helpful to students.	Work on better delivery rather than just reading off slides.	
21	26	FALL 2015	NATS 2203 1 15FA	Biology	3	3	3	4	4	3	4	3	3	3	3	4	3	3	great class, very informative	prepared, knew material		
21	26	FALL 2015	NATS 2203 1 15FA	Biology	3	3	3	3	3	3	3	3	3	3	3	3	3	3		knowledgable	not reading off the computer	

21	26	FALL 2015	NATS 2203 1 15FA	Biology	4	4	3	3	3	3	3	3	3	3	3	3	3	3	It being at night was very hard at times; strengths- teacher was nice about it	willing to work w/ students	Add more interactions	
13	23	FALL 2015	NATS 2101 1 15FA	Earth Science Lab	3	2	3	4	1	3	1	3	3	2	2	3	3	4	This course was monotonous and boring; all work, no play	very smart knows his stuff, just not how to teach	More instruction/help. Nothing is ever explained. More communication	I feel like the 7 point system robs me of a hard-earned grade
13	23	FALL 2015	NATS 2101 1 15FA	Earth Science Lab	3	3	3	3	3	3	3	3	3	2	1	3	3	1	good class		Please grade our stuff on time so we know if we are missing assignments so that we don't have to make them up during finals week	
13	23	FALL 2015	NATS 2101 1 15FA	Earth Science Lab	4	4	4	4	4	4	4	4	4	4	4	4	4	4	strengths-very smart weakness-sometimes hard to understand	He is very smart and knows his information	communicate more individually	He is a really good teacher.
13	23	FALL 2015	NATS 2101 1 15FA	Earth Science Lab	4	4	4	4	4	4	4	4	4	4	4	4	4	4				
13	23	FALL 2015	NATS 2101 1 15FA	Earth Science Lab	3	1	3	3	3	4	1	3	1	3	4	4	1	1	N/A	N/A	Try connecting w/ the students more effectively.	N/A
13	23	FALL 2015	NATS 2101 1 15FA	Earth Science Lab	4	3	4	3	3	4	4	4	3	3	4	4	4	4	It's basic.	very knowledgeable in his area of study.	communicate more clearly.	
13	23	FALL 2015	NATS 2101 1 15FA	Earth Science Lab	4	1	4	1	1	4	4	1	1	4	2	4	4	1			communicate better via email	
13	23	FALL 2015	NATS 2101 1 15FA	Earth Science Lab	4	4	4	4	4	4	4	4	4	4	4	4	4	4				
13	23	FALL 2015	NATS 2101 1 15FA	Earth Science Lab	4	4	4	4	4	4	4	4	4	4	4	4	4	4		very knowledgeable	more communication	
13	23	FALL 2015	NATS 2101 1 15FA	Earth Science Lab	4	4	4	4	4	4	4	4	4	4	4	4	4	4		very intelligent	go over more in lab	
13	23	FALL 2015	NATS 2101 1 15FA	Earth Science Lab	3	3	3	3	3	3	3	3	3	3	3	3	3	3	Independent working; a little confusing sometimes hands on	very smart	be a little more explanatory	
13	23	FALL 2015	NATS 2101 1 15FA	Earth Science Lab	3	3	3	3	3	3	3	3	3	3	3	3	3	3	We learn a lot, work isn't very hands on though.	He is understanding & very intelligent	Have us do more experiments	Rahmat is awesome
13	23	FALL 2015	NATS 2101 1 15FA	Earth Science Lab	4	4	4	4	4	4	4	4	4	4	4	4	4	4	s- covers lots of information	knowledgable; hard to understand	speak slower!	
17	36	FALL 2015	NATS 2103 1 15FA	Earth Science	4	4	4	2	4	4	4	4	4	4	4	4	4	4	Good course to take & learn a lo	very smart	more communication with students never replies to any emails.	NA
17	36	FALL 2015	NATS 2103 1 15FA	Earth Science	4	4	4	4	3	3	4	4	4	3	4	4	4	3		his knowledge		
17	36	FALL 2015	NATS 2103 1 15FA	Earth Science	4	4	4	4	4	4	4	4	4	4	4	4	4	4	strengths- very smart weakness- long	He is very smart	Reply to his emails	I loved this class.
17	36	FALL 2015	NATS 2103 1 15FA	Earth Science	4	4	4	4	4	4	4	4	4	4	4	4	4	4	strengths-it had good material; weaknesses-could have gone into more details	He's kind.	Challenge the students. No open book tests and make the lab presentation thing not optional. This is college	You're super sweet
17	36	FALL 2015	NATS 2103 1 15FA	Earth Science	4	4	4	4	4	4	4	4	4	4	4	4	4	4	covers lots of material; hard to understand prof. sometimes	very knowledgable	speak slower	
17	36	FALL 2015	NATS 2103 1 15FA	Earth Science	3	3	3	3	3	3	3	3	3	3	3	3	3	3	understandable, fun topic	knowledgeable, friendly		
17	36	FALL 2015	NATS 2103 1 15FA	Earth Science	4	4	4	4	4	4	4	4	4	4	4	4	4	4	His knowledge is his strength and his weaknesses I couldn't tell.	His knowledge & his service.He s just fine the way he is	I really enjoy learn a lot with Mr-Rahmat- I love the professor	
17	36	FALL 2015	NATS 2103 1 15FA	Earth Science	4	3	3	4	3	4	4	4	4	4	4	2	3	4	The course offers a wide overview of everything pertaining to earth science. Perhaps too wide.	Rahmat is obviously very intelligent and knows what he's talking about.	Perhaps Rahmat is too intelligent, he seems to be forcing himself down to our level. He could also communicate more clearly about the nature of assignments.	All of that said, I'm glad Rahmat was my professor.
17	36	FALL 2015	NATS 2103 1 15FA	Earth Science	3	3	3	4	4	4	3	3	3	3	4	4	4	3	s always on time	Had jokes	Study guide	
17	36	FALL 2015	NATS 2103 1 15FA	Earth Science	4	4	4	4	4	4	4	4	4	4	4	4	4	4		Quality lad	Too greasy!	Love it
17	36	FALL 2015	NATS 2103 1 15FA	Earth Science	4	4	4	4	4	4	4	4	4	4	4	4	4	4				
17	36	FALL 2015	NATS 2103 1 15FA	Earth Science	3	3	3	3	3	3	3	3	3	3	3	3	3	3	strengths- good information Weakness: hard to understand	knows material	other visual aids	
17	36	FALL 2015	NATS 2103 1 15FA	Earth Science	4	4	3	4	3	4	4	4	3	3	3	3	4	4				
17	36	FALL 2015	NATS 2103 1 15FA	Earth Science	3	3	3	3	4	4	4	4	4	3	3	3	4	4	You could do hands on work; some of the material was hard to follow	very knowledgable & nice!	N/A	
17	36	FALL 2015	NATS 2103 1 15FA	Earth Science	3	2	3	3	1	3	3	3	2	2	3	2	3	3	N/A	N/A	he should work on his interaction w/students. he needs to be more careful w/ attendence and identifying what his objectives are for this course.	N/A
17	36	FALL 2015	NATS 2103 1 15FA	Earth Science	4	4	4	4	4	4	4	4	3	3	4	4	4	4				
17	36	FALL 2015	NATS 2103 1 15FA	Earth Science	3	2	4	3	3	4	3	3	2	3	2	3	4	4	seems exactly like my earth science class from high school	Eager to teach.	Slow down on his notes.	

4	6	FALL 2015	PHYS 2104 1 1SFA	Physics I (Including Lab)	4	3	4	4	4	4	3	4	4	4	3	3	4	4		Very knowledgable and understanding of material and students.	Maybe don't be so eay on us in the exams that way the class average isn't so high considering physics is one of the hardest subjects in college.	Do more lecturing. Even though the lectures are boring. We would cover material more thoughly if you lectured more.
4	6	FALL 2015	PHYS 2104 1 1SFA	Physics I (Including Lab)	4	4	4	4	4	4	4	4	4	4	4	4	4	4	5- it's a great class the material is well taught and a good environment for learning physics. W- moved a little fast, fast-paced.	He is patient, makes sure everyone is on the same page. Very understanding. An overall great professor		
4	6	FALL 2015	PHYS 2104 1 1SFA	Physics I (Including Lab)	3	3	3	4	3	3	3	3	3	3	3	3	3	3	I liked the use of visual images and hands on labs.	understands the material well, and works hard to make sure the students do also	Hold students to the assigned due dates; Felt we could have been challenged a little more	Great Class!
4	6	FALL 2015	PHYS 2104 1 1SFA	Physics I (Including Lab)	4	4	4	4	4	4	4	4	4	4	4	4	4	4	strengths are very helpful	very understanding		
				Physics I (Including Lab)																		
2	3	FALL 2015	PHYS 2211 1 1SFA	Physics I (Including Lab)	3	3	3	4	4	2	4	4	4	4	3	4	4	1	Informative; doesn't seem very structured	very helpful	stricter and put grades in on time	
2	3	FALL 2015	PHYS 2211 1 1SFA	Physics I (Including Lab)	3	3	3	3	3	3	3	3	3	3	3	3	3	1				I enjoyed lab a lot. No problems
2	3	FALL 2015	PHYS 2213 1 1SFA	Modern Physics	3	3	3	3	2	3	3	3	3	3	1	3	3	3	Strengths: good explanation; Weakness: slow speed	Good with helping when needed	Teach at a faster spped. Instead of staying on one subject for two weeks, keep the ball rolling.	
2	3	FALL 2015	PHYS 2213 1 1SFA	Modern Physics	4	3	4	4	4	3	4	4	4	3	3	3	3	1		friendly and cooperative	put grades in d2l	
2	3	FALL 2015	PHYS 3133 1 1SFA	Electromagnetism	3	2	2	4	3	1	4	3	2	2	1	1	3	2				
2	3	FALL 2015	PHYS 3133 1 1SFA	Electromagnetism	3	3	4	4	4	3	4	4	4	4	4	4	4	1			put grades in d2l	
1	4	FALL 2015	MATH 1513 W1 1SFA	College Algebra	4	4	3	4	4	4	3	3	4	3	4	4	4	4				
					3.73	3.66	3.63	3.68	3.66	3.63	3.66	3.71	3.67	3.57	3.534	3.597	3.669	3.627				

Overall mear 3.65
Min 3.53 Q11 The speed in which material was covered in this class was reasonable.
Max 3.73 Q1 The instructor was well prepared for class on a regular basis.

Number of Responses per Course	Enrollment	Month	Instructor	Course Description	Course	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18
14	22	Spring 2016	Allen Dukes	College Math	MATH 1103 1 16SP	3	3	3	3	3	3	3	3	3	3	3	3	3	3	Nothing he is doing great teaching class	gives all the info	Nothing at all	
14	22	Spring 2016	Allen Dukes	College Math	MATH 1103 1 16SP	3	3	3	3	3	3	3	3	3	3	3	3	3	3	Great course	N/A	N/A	
14	22	Spring 2016	Allen Dukes	College Math	MATH 1103 1 16SP	4	3	4	3	4	4	3	4	4	4	4	3	4	3	Dukes has an odd way of teaching that takes awhile to get use too.	Always eager to help, pulled me aside multiply times to see if I needed help	n/a	n/a
14	22	Spring 2016	Allen Dukes	College Math	MATH 1103 1 16SP	4	3	4	4	3	4	4	4	3	4	4	4	4	4	I am just horrible at math. But Professor dukes is a great teacher	He is very patient		
14	22	Spring 2016	Allen Dukes	College Math	MATH 1103 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	4	patience and willingness to explain details	I like the patience of the instructor	maybe if the class was more interactive	
14	22	Spring 2016	Allen Dukes	College Math	MATH 1103 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	3				
14	22	Spring 2016	Allen Dukes	College Math	MATH 1103 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	4	Book is expensive	Dukes knows his stuff & teaches it in very understandable/practical ways.		N/A
14	22	Spring 2016	Allen Dukes	College Math	MATH 1103 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	4	Good instructor	explains things well	nothing	
14	22	Spring 2016	Allen Dukes	College Math	MATH 1103 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	4	strengths: learned a lot throughout this course Weakness; none	Instructor was super awesome & was worth his time	N/A	Had a great semester, thanks for everything
14	22	Spring 2016	Allen Dukes	College Math	MATH 1103 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	4	strengths- covered a lot of material; weaknesses- moved pretty quickly	knows the material and is helpful	slow down a little bit	
14	22	Spring 2016	Allen Dukes	College Math	MATH 1103 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	4	It's math	good teacher		
14	22	Spring 2016	Allen Dukes	College Math	MATH 1103 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	4				
14	22	Spring 2016	Allen Dukes	College Math	MATH 1103 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	4	Great teacher	Explains everything well in detail	Great Teacher	
14	22	Spring 2016	Allen Dukes	College Math	MATH 1103 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	4	Dukes is a great professor			I really love having Dukes as a professor
5	8	Spring 2016	Allen Dukes	College Algebra	MATH 1513 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	4	strengths- went over everything. Weaknesses- went a bit fast at times	Helped with what we needed help with.	Just keep doing what you're doing.	
5	8	Spring 2016	Allen Dukes	College Algebra	MATH 1513 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	4		strengths- lots of notes; weaknesses- hard information to contain.	strengths- speaks loud & clear. Weaknesses- goes to fast, needs to slow down.	
5	8	Spring 2016	Allen Dukes	College Algebra	MATH 1513 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	4	The strengths were very good class time spent & the materials used for the class were appropriate.	The instructor knows what he is talking & teaching about very well!	Be more interactive.	I love the instructor, He is a very great teacher!
5	8	Spring 2016	Allen Dukes	College Algebra	MATH 1513 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	4	He's awesome and nice	he's awesome		
5	8	Spring 2016	Allen Dukes	College Algebra	MATH 1513 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	4	To fast, very confusing	very knowledgable	don't stand in front of the board!!!	N/A
5	6	Spring 2016	Amanda Porter	Biology	NATS 2203 1 16SP	4	4	4	4	4	4	4	4	4	3	3	3	4	3	The course is detailed. Too detailed. I'll never use this information again.	Porter is very knowledgable, friendly, and helpful.	Clearer communications regarding homework.	

5	6	Spring 2016	Amanda Porter	Biology	NATS 2203 1 16SP	3	3	3	3	3	3	3	3	3	3	3	3	3	Information not covered well enough	Interesting to listen to	cover less	
5	6	Spring 2016	Amanda Porter	Biology	NATS 2203 1 16SP	4	3	3	3	4	4	4	3	2	2	1	4	3	good class, just went over stuff really fast and class time was very boring at times	very nice, reasonable, and knows what she's talking about	Maybe have more activities that keep us engaged	good semester
5	6	Spring 2016	Amanda Porter	Biology	NATS 2203 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	Good amount of time spent!			
5	6	Spring 2016	Amanda Porter	Biology	NATS 2203 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4				
13	17	Spring 2016	Amanda Porter	Biology and Lab	NATS 2204 1 16SP	4	4	4	3	4	3	3	3	4	3	4	3	4	Awesome person	Awesome person	shorter class	
13	17	Spring 2016	Amanda Porter	Biology and Lab	NATS 2204 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	strengths: knowledgable Weaknesses: time limit	knows her stuff	N/A	Great job
13	17	Spring 2016	Amanda Porter	Biology and Lab	NATS 2204 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	strengths: flows well, lots of info Weakness: duration	very smart	Make sure everyone is paying attention	love the class
13	17	Spring 2016	Amanda Porter	Biology and Lab	NATS 2204 1 16SP	3	3	3	3	3	3	3	3	3	3	3	3	3	strength- homework; weakness-test	She's great. I love Esther	She 's great	
13	17	Spring 2016	Amanda Porter	Biology and Lab	NATS 2204 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	She's great	She's great	She's great	She's great
13	17	Spring 2016	Amanda Porter	Biology and Lab	NATS 2204 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	strengths were that the class was very organized.	The instructor knows what she is teaching.		I loved both lab & class.
13	17	Spring 2016	Amanda Porter	Biology and Lab	NATS 2204 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	N/A	very knowledgable	No group projects	N/A
13	17	Spring 2016	Amanda Porter	Biology and Lab	NATS 2204 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	Very reasonable but time is very inconvinient	Easy to reach	More interaction	
13	17	Spring 2016	Amanda Porter	Biology and Lab	NATS 2204 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	Fun, interesting	Good job explain information	N/A	
13	17	Spring 2016	Amanda Porter	Biology and Lab	NATS 2204 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4			Keep doing what you're doing	
13	17	Spring 2016	Amanda Porter	Biology and Lab	NATS 2204 1 16SP	3	3	3	3	3	3	3	3	3	3	3	3	3	She covers everything and explains it well.	She's well spoken and knows the material.		
13	17	Spring 2016	Amanda Porter	Biology and Lab	NATS 2204 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	strengths-cut stuff open ; weakness-nothing	She cool and explains everything		
13	17	Spring 2016	Amanda Porter	Biology and Lab	NATS 2204 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	strengths: effective teaching methods, personable	Awesome teacher!		
3	4	Spring 2016	Carol Fowlkes	Calculus II	MATH 2214 1 16SP	4	3	4	4	4	1	4	4	3	4	3	3	4	4	very knowledgable with material	Rely less on online for homework. Maybe do more paper homework.	
3	4	Spring 2016	Carol Fowlkes	Calculus II	MATH 2214 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	everybody participate in class	She explains everything and help you at anytime when you don't understand		
3	4	Spring 2016	Carol Fowlkes	Calculus II	MATH 2214 1 16SP	3	3	4	4	3	4	3	3	3	4	3	4	4	She teaches good math.	She knows math and can teach in many different ways.		Always use WebAssign. Stay away from MyMathLab.
4	7	Spring 2016	Carol Fowlkes	Linear Algebra	MATH 3103 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	we go over everything beofre we do our homework	She explains everything really well		
4	7	Spring 2016	Carol Fowlkes	Linear Algebra	MATH 3103 1 16SP	3	3	3	4	4	3	4	4	3	3	4	4	3	4			USE WEBASSIGN NOT MYMATHLAB
4	7	Spring 2016	Carol Fowlkes	Linear Algebra	MATH 3103 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	4			
4	7	Spring 2016	Carol Fowlkes	Linear Algebra	MATH 3103 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	4			
16	21	Spring 2016	Carol Fowlkes	Introduction to Statistics	MATH 3703 1 16SP	4	3	4	4	3	3	3	4	4	4	3	3	3	4	online homework	in-class help	N/A	N/A
16	21	Spring 2016	Carol Fowlkes	Introduction to Statistics	MATH 3703 1 16SP	4	3	4	4	4	4	4	4	3	3	3	3	4	2	Difficult course, good teacher			

16	21	Spring 2016	Carol Fowlkes	Introduction to Statistics	MATH 3703 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4		She was available majority of the time and was always helpful. She made it easier to understand the material.			
16	21	Spring 2016	Carol Fowlkes	Introduction to Statistics	MATH 3703 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	easier with exel taking out the math piece	helpful, knowledgable			Dr. Fowlkes is truly the smartest & most knowledgable professor ever! Wish you could teach every subject.
16	21	Spring 2016	Carol Fowlkes	Introduction to Statistics	MATH 3703 1 16SP	3	4	3	3	4	4	4	3	4	3	4	3	4	3	Extra effort to explain			
16	21	Spring 2016	Carol Fowlkes	Introduction to Statistics	MATH 3703 1 16SP	4	4	3	4	4	4	4	4	4	4	4	4	4	4	open door policy; very easy to go to for help!	Wants the students to learn.	More work to understand.	
16	21	Spring 2016	Carol Fowlkes	Introduction to Statistics	MATH 3703 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	4	Enjoyable class.	Very organized		
16	21	Spring 2016	Carol Fowlkes	Introduction to Statistics	MATH 3703 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	4		always prepared for class and answer the question in the class room and outside of the classroom		
16	21	Spring 2016	Carol Fowlkes	Introduction to Statistics	MATH 3703 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	4	good variety of things to learn	patient. knowledgable		
16	21	Spring 2016	Carol Fowlkes	Introduction to Statistics	MATH 3703 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	4		well organized		Awesome
16	21	Spring 2016	Carol Fowlkes	Introduction to Statistics	MATH 3703 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	4	Easy to grasp, content was well taught	Easy to talk to, fun in class		
16	21	Spring 2016	Carol Fowlkes	Introduction to Statistics	MATH 3703 1 16SP	3	4	4	4	3	4	4	4	4	4	4	4	4	4		Explains material well		None
16	21	Spring 2016	Carol Fowlkes	Introduction to Statistics	MATH 3703 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	4	Everything	Everything		
16	21	Spring 2016	Carol Fowlkes	Introduction to Statistics	MATH 3703 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	4	explains the subject very well	gets class to understand the subject at hand		
16	21	Spring 2016	Carol Fowlkes	Introduction to Statistics	MATH 3703 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	4				
16	21	Spring 2016	Carol Fowlkes	Introduction to Statistics	MATH 3703 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	4				
1	1	Spring 2016	Carol Fowlkes	Differential Equations	MATH 4013 II 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	4	She was great	Everything	false, she is perfect	N/A
3	4	Spring 2016	Carol Fowlkes	Abstract Algebra	MATH 4103 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	4	She's fantastic	Everything		everyone loves Fowlkes
3	4	Spring 2016	Carol Fowlkes	Abstract Algebra	MATH 4103 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	4	Carol is awesome!	Everything	Group test	Love Carol!
3	4	Spring 2016	Carol Fowlkes	Abstract Algebra	MATH 4103 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	4	She's Wonderful!	Everything	She's Perfect	A++++++++++
9	14	Spring 2016	Douglas DeCarlo	Math for Teachers I	MATH 2203 1 16SP	4	3	4	4	4	4	4	3	4	4	3	3	4	4	strengths- fun class; valuable material to help you on the OGET Weaknesses- its in the evening	Definitely knows his stuff; understands when we need to miss class, encouraging, fun	Maybe cut back a little on the stories	
9	14	Spring 2016	Douglas DeCarlo	Math for Teachers I	MATH 2203 1 16SP	4	4	4	4	4	4	4	3	4	4	4	4	4	4	S: I understanfd math better, made it easy. W: None	He is one of my most favorite and best math teachers ever!	He is great.	I enjoyed it and feel more confident in math.
9	14	Spring 2016	Douglas DeCarlo	Math for Teachers I	MATH 2203 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	4		very intelligent	Burst out in song more often!	
9	14	Spring 2016	Douglas DeCarlo	Math for Teachers I	MATH 2203 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	4	interesting - strength; weakness-none	Teaches math so easily understandable Lets us know why we need to know this information.	N/A	Great class! Learned a lot.
9	14	Spring 2016	Douglas DeCarlo	Math for Teachers I	MATH 2203 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	4	Made concepts easy to understand. Refreshed my memory on math concepts I hadn't had in awhile.	Very funny & made math class enjoyable	N/A	

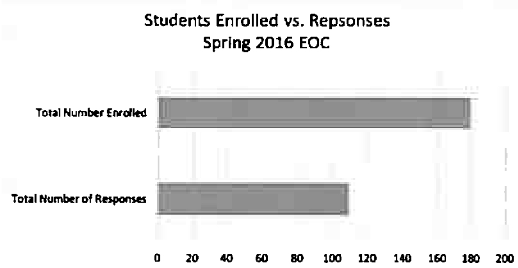
9	14	Spring 2016	Douglas DeCarlo	Math for Teachers I	MATH 2203 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	strengths- HW Weakness-subject	He's great!	He's awesome!	Great professor!
9	14	Spring 2016	Douglas DeCarlo	Math for Teachers I	MATH 2203 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	Great class, Great professor	Awesome at explaining. Pay him more!	he's effective enough	Raise his pay!!
9	14	Spring 2016	Douglas DeCarlo	Math for Teachers I	MATH 2203 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4				BEST MATH PROF. EVER!
9	14	Spring 2016	Douglas DeCarlo	Math for Teachers I	MATH 2203 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4			Love him!	
1	4	Spring 2016	Olivia Bates	Business Math	MATH 2503 W2 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4		The instructor was very helpful and graded all assignment with exceptional speed.		I'm not sure that I am the biggest fan of Pearson MyMathLab, but everything ended up working out fine.
4	7	Spring 2016	Olivia Bates	College Algebra	MATH 1513 W1 16SP	3	3	3	3	4	4	4	4	3	4	4	4	4	Online courses help to speed up the degree track. I have appreciated being able to participate in them. I can work at my own pace and receive instruction when needed. One weakness was not having the video instruction online ahead of time.	Responding to emails in a timely manner and explaining the assignments.	Posting the videos for instruction before the middle of the week that the assignment is due.	
4	7	Spring 2016	Olivia Bates	College Algebra	MATH 1513 W1 16SP	3	3	3	3	3	2	3	3	2	3	2	2	3	This course is not a good idea for anyone that struggles with algebra, unless they have someone close by and in person who is able to help.			
4	7	Spring 2016	Olivia Bates	College Algebra	MATH 1513 W1 16SP	1	1	1	2	3	3	3	3	3	3	3	3	3	Its fast paced and well laid out on the mymathlab.	She responds to emails well	She was not very helpful and is just another reason why I feel like MACU is not the right University for me.	Disappointed in Olivia Bates as instructor. Other than that the class was fine.
4	7	Spring 2016	Olivia Bates	College Algebra	MATH 1513 W1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	I loved the fact that it is offered online. /	She is very helpful and understanding.		
1	1	Spring 2016	Rahmat Rahmat	Concepts of Physics	PHYS 1133 II 16SP	3	3	3	3	3	3	3	3	3	3	3	3	3	Awesome	Awesome	Awesome	Awesome
1	1	Spring 2016	Rahmat Rahmat	Physics I	PHYS 2103 II 16SP	3	3	3	3	3	3	3	3	3	3	3	3	3	Awesome	Awesome	Awesome	Awesome
2	4	Spring 2016	Rahmat Rahmat	Physics II (including lab)	PHYS 2204 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4		So kind, extremely knowledgable, Always prepared.	Be more strict with syllabis rules	I love Dr. Rahmat!
2	4	Spring 2016	Rahmat Rahmat	Physics II (including lab)	PHYS 2204 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	strengths is the class size, being so small the professor can actually teach us and help if we don't understand material.	He gienully cares about us learning the material.		
1	2	Spring 2016	Rahmat Rahmat	Classical Mechanics	PHYS 2223 1 16SP	4	3	3	4	4	4	4	4	3	4	4	4	4				
3	13	Spring 2016	Rahmat Rahmat	Earth Science Lab	NATS 2101 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	N/A	N/A	N/A	N/A
3	13	Spring 2016	Rahmat Rahmat	Earth Science Lab	NATS 2101 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	N/A	N/A	N/A	N/A
3	13	Spring 2016	Rahmat Rahmat	Earth Science Lab	NATS 2101 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	It helps you know how the world works	he is always prepared.		
12	20	Spring 2016	Rahmat Rahmat	Earth Science	NATS 2103 1 16SP	3	3	3	4	4	4	4	3	2	3	1	2	3	Goes through material too quickly. He knows what he is teaching.	Humble & knowledgable.	Try several different ways to explain things.	

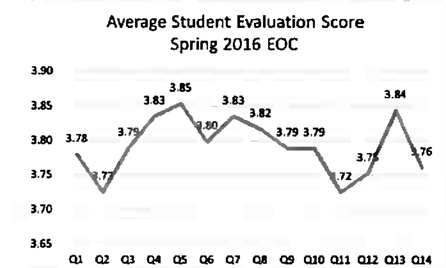
12	20	Spring 2016	Rahmat Rahmat	Earth Science	NATS 2103 1 16SP	4	3	4	4	4	4	3	4	4	4	3	4	4	4	I really enjoyed how we actually covered material and learned things everyday. I did not like just doing slides though.	He was very knowledgable	Do something other than slides.	I am grateful that we were able to use our notes.
12	20	Spring 2016	Rahmat Rahmat	Earth Science	NATS 2103 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	4	strengths: funny, not boring Weaknesses: too long	always gives an example, very funny.		
12	20	Spring 2016	Rahmat Rahmat	Earth Science	NATS 2103 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	4	Is fair to all students with policy. When asking questions is eager to help you fully understand. Is also willing to help after class.	N/A	N/A	N/A
12	20	Spring 2016	Rahmat Rahmat	Earth Science	NATS 2103 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	4	He has a entertaining class, there are no weaknesses of this course.	He is great at helping any student.	N/A	he is Great!
12	20	Spring 2016	Rahmat Rahmat	Earth Science	NATS 2103 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	4	meaningful content & efficient/effective.	nice	accent	
12	20	Spring 2016	Rahmat Rahmat	Earth Science	NATS 2103 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	4	I have no complaints	Dr. Rahmat is awesome. Very knowledgable and passionate about the course. He makes the course fun and engaging	no complaints	
12	20	Spring 2016	Rahmat Rahmat	Earth Science	NATS 2103 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	4	He has an informative and entertaining class.	He is always positive.		He is AMAZING!
12	20	Spring 2016	Rahmat Rahmat	Earth Science	NATS 2103 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	4	Strengths- teaches with joy Weakness- talks long	funny/easy going knowledgable,	nothing	
12	20	Spring 2016	Rahmat Rahmat	Earth Science	NATS 2103 1 16SP	3	3	3	4	4	4	4	4	4	3	3	3	4	3	Informative	helpful	N/A	N/A
12	20	Spring 2016	Rahmat Rahmat	Earth Science	NATS 2103 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	4	Very engagin, learning environment ON POINT!	Humble, includes Christ in all his lectures, understanding, love his students	N/A	Rahmat is the reason why I'm going back to MACU next year. Incredible man of God, good example
12	20	Spring 2016	Rahmat Rahmat	Earth Science	NATS 2103 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	4	Great information and very important content.(PRO) Content isn't that exciting(CON)	VERY,VERY POSITIVE! And knows a lot.	He is extremely effective already!	
2	5	Spring 2016	Rahmat Rahmat	Astronomy Lab	NATS 2601 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	4	good teaching skills	He's good at talking & good at presenting the powerpoints w/ information	I believe he is already doing a great job, he works hard on our lessons, & makes sure they are ready every class period.	
2	5	Spring 2016	Rahmat Rahmat	Astronomy Lab	NATS 2601 1 16SP	2	2	3	4	4	2	2	4	4	4	4	4	4	1	It needs more instructions. Explanation of how to do the work. It is not very organized. It has helped me understand new things.	Open to questions.	Teach more on the lab work. Keep up with students work better and know what he has covered so far in class.	

9	18	Spring 2016	Rahmat Rahmat	Astronomy	NATS 2603 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	4	very good professor, learned a lot in this course.	*read as above*		
9	18	Spring 2016	Rahmat Rahmat	Astronomy	NATS 2603 1 16SP	3	3	3	4	4	4	4	3	4	3	1	1	3	3	The professor was knowledgable of material and approachable with questions. He went over course material too quickly. The course is too long.	He knows what he is teaching. He allows us to ask questions. He is humble.	He needs to slow down when teaching. Use other resources besides powerslide. Be confident.	He is very smart and knows what he is teaching. He goes over too much material in a short amount of time though.
9	18	Spring 2016	Rahmat Rahmat	Astronomy	NATS 2603 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	4				
9	18	Spring 2016	Rahmat Rahmat	Astronomy	NATS 2603 1 16SP	3	3	3	3	3	3	3	3	3	3	3	3	3	3	weakness- maybe make the class more fun, the lectures got boring. Strength- The ability to use our resources on quizzs and exams.	His ability to work with the class on due dates.		
9	18	Spring 2016	Rahmat Rahmat	Astronomy	NATS 2603 1 16SP	4	4	4	4	4	3	4	4	4	3	4	3	4	4	The strengths are the equipment.	His good teaching skills	I think he does good already.	
9	18	Spring 2016	Rahmat Rahmat	Astronomy	NATS 2603 1 16SP	3	3	3	3	3	3	3	3	3	3	3	3	3	3				
9	18	Spring 2016	Rahmat Rahmat	Astronomy	NATS 2603 1 16SP	3	4	4	3	3	3	4	3	4	3	3	4	3	4				
9	18	Spring 2016	Rahmat Rahmat	Astronomy	NATS 2603 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	4	Great content, interesting class.	Covers some material repeatedly; not sure if that is totally necessary.	He does pretty well, although maybe don't spend so much time on one chapter.	
9	18	Spring 2016	Rahmat Rahmat	Astronomy	NATS 2603 1 16SP	4	4	4	4	4	4	4	4	4	4	4	4	4	4	It is a very good class. It is easy to understand most of the terms.	Great teacher. He knows what he is doing. He is very helpful.	None	

Total Number of Responses	Total Number Enrolled
109	179

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14
3.78	3.72	3.79	3.83	3.85	3.80	3.83	3.82	3.79	3.79	3.72	3.75	3.84	3.76



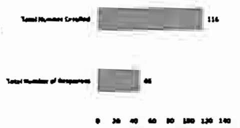


2. The instructor presented material in an understandable manner
11. The speed in which material was covered in this class was reasonable.
5. The syllabus clearly explained the class objectives, activities, grading, and attendance policies.

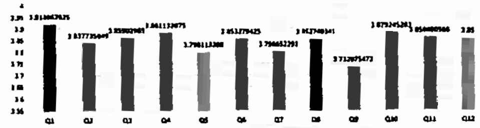
Total Number of Responses	Total Number Enrolled
46	116

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
3.918868	3.837736	3.85903	3.881132	3.798113	3.853279	3.798652	3.85274	3.733075	3.879245	3.858491	3.85

Students Enrolled v. Responses



Average Student Evaluation Score
Fall 2016



Top 3
1. The instructor was knowledgeable about the material covered in the course.
4. Instructions and expectations for assignments were clear.
10. The organization of the course was conducive to learning.

Bottom 3
5. The instructor encouraged applied learning by demonstrating how course concepts connect to professional and/or personal life
7. The instructor's grading and feedback were constructive, fair and helped me improve.
9. The course effectively integrated technology and Internet resources that contributed to learning.

Number Of Responses	Enrollment	Course Title	Course Code	School Name
8	8	Algebra for Teachers	MATH 2103 1 16FA	School of Math and Science
8	8	Algebra for Teachers	MATH 2103 1 16FA	School of Math and Science
8	8	Algebra for Teachers	MATH 2103 1 16FA	School of Math and Science
8	8	Algebra for Teachers	MATH 2103 1 16FA	School of Math and Science
8	8	Algebra for Teachers	MATH 2103 1 16FA	School of Math and Science
8	8	Algebra for Teachers	MATH 2103 1 16FA	School of Math and Science
8	8	Algebra for Teachers	MATH 2103 1 16FA	School of Math and Science
8	8	Algebra for Teachers	MATH 2103 1 16FA	School of Math and Science
6	9	Math for Teachers II	MATH 2303 1 16FA	School of Math and Science
6	9	Math for Teachers II	MATH 2303 1 16FA	School of Math and Science
6	9	Math for Teachers II	MATH 2303 1 16FA	School of Math and Science
6	9	Math for Teachers II	MATH 2303 1 16FA	School of Math and Science
6	9	Math for Teachers II	MATH 2303 1 16FA	School of Math and Science
6	9	Math for Teachers II	MATH 2303 1 16FA	School of Math and Science
6	29	College Math	MATH 1103 1 16FA	School of Math and Science
6	29	College Math	MATH 1103 1 16FA	School of Math and Science
6	29	College Math	MATH 1103 1 16FA	School of Math and Science
6	29	College Math	MATH 1103 1 16FA	School of Math and Science
6	29	College Math	MATH 1103 1 16FA	School of Math and Science
6	29	College Math	MATH 1103 1 16FA	School of Math and Science
4	21	College Algebra	MATH 1513 1 16FA	School of Math and Science
4	21	College Algebra	MATH 1513 1 16FA	School of Math and Science
4	21	College Algebra	MATH 1513 1 16FA	School of Math and Science
4	21	College Algebra	MATH 1513 1 16FA	School of Math and Science
1	9	Introduction to Statistics	MATH 2703 1 16FA	School of Math and Science
[illegible]	3	College Algebra	MATH 1513 W1 16FA	School of Math and Science
1	2	Calculus I and Analytic G	MATH 2114 1 16FA	School of Math and Science
1	4	College Geometry I	MATH 4003 1 16FA	School of Math and Science
3	9	Earth Science Lab	NATS 2101 1 16FA	School of Math and Science
3	9	Earth Science Lab	NATS 2101 1 16FA	School of Math and Science
3	9	Earth Science Lab	NATS 2101 1 16FA	School of Math and Science
7	22	Earth Science	NATS 2103 1 16FA	School of Math and Science
7	22	Earth Science	NATS 2103 1 16FA	School of Math and Science
7	22	Earth Science	NATS 2103 1 16FA	School of Math and Science
7	22	Earth Science	NATS 2103 1 16FA	School of Math and Science
7	22	Earth Science	NATS 2103 1 16FA	School of Math and Science
7	22	Earth Science	NATS 2103 1 16FA	School of Math and Science
7	22	Earth Science	NATS 2103 1 16FA	School of Math and Science
12	5	Biology	NATS 2204 1 16FA	School of Math and Science
12	5	Biology	NATS 2204 1 16FA	School of Math and Science
12	5	Biology	NATS 2204 1 16FA	School of Math and Science
12	5	Biology	NATS 2204 1 16FA	School of Math and Science
12	5	Biology	NATS 2204 1 16FA	School of Math and Science
12	5	Biology	NATS 2204 1 16FA	School of Math and Science
12	21	Biology & Lab	NATS 2204 1 16FA	School of Math and Science
12	21	Biology & Lab	NATS 2204 1 16FA	School of Math and Science
12	21	Biology & Lab	NATS 2204 1 16FA	School of Math and Science

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
4	4	4	4	4	4	4	4	4	4	4	4
4	4	4	4	4	4	4	4	4	4	4	4
4	4	4	4	4	3	4	4	4	4	4	4
4	4	4	4	4	4	4	3	4	4	4	4
4	4	4	4	4	4	4	4	4	4	4	4
4	4	4	4	4	4	4	4	4	4	4	4
4	4	3	4	4	3	3	4	4	4	4	4
4	4	4	4	4	4	4	4	4	4	4	4
4	4	4	4	4	4	4	4	4	4	4	4
4	4	4	4	4	4	4	4	4	4	4	4
4	4	4	4	4	4	4	4	4	4	4	4
4	4	4	4	4	4	4	4	4	4	4	4
4	4	4	4	4	4	4	4	4	4	4	4
4	4	4	4	4	4	4	4	4	4	4	4
4	4	3.928571	4	4	3.857143	3.928571	3.928571	4	4	4	4
3	2	2	3	2	3	2	4	2	2	1	2
3	3	3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4	4	4
4	4	4	4	4	4	4	4	4	4	4	4
4	3	4	4	3	4	3	3	2	4	3	3
4	4	4	4	4	4	4	4	4	4	4	4
3	3	3	3	2	3	2	3	2	3	4	3
4	3	4	4	3	4	4	3	2	4	4	4
4	4	4	4	4	4	4	4	4	4	4	4
4	4	4	4	4	4	4	4	1	4	4	
3.7	3.4	3.6	3.7	3.3	3.7	3.4	3.6	2.8	3.6	3.5	3.444444
4	4	4	4	4	4	4	4	4	4	4	4
[illegible]	4	4	[illegible]	[illegible]	[illegible]	4	[illegible]	[illegible]	[illegible]	[illegible]	4
[illegible]	4	4	[illegible]	[illegible]	[illegible]	4	[illegible]	[illegible]	[illegible]	[illegible]	4
4	4	4	4	4	3	4	3	4	4	4	4
4	4	4	4	4	3.666667	4	3.666667	4	4	4	4
4	4	4	4	4	4	4	4	4	4	4	4
4	4	4	4	4	4	4	4	4	4	4	4
4	4	4	4	4	4	4	4	4	4	4	4
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3	3	3	3	3	3	3	3	3	3	3	3
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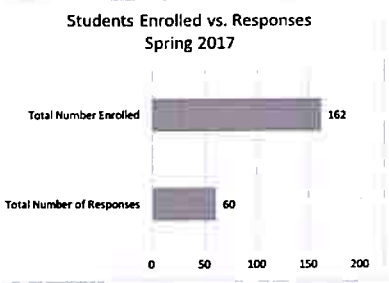
4	4	4	4	4	4	4	4	4	4	4	4
4	4	4	4	4	4	4	4	4	4	4	4
4	4	4	4	4	4	4	4	4	4	4	4
4	4	4	4	4	4	4	4	4	4	4	4

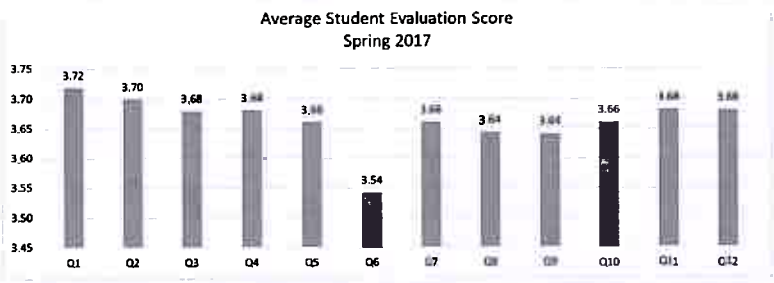
Q13	Q14	Q15	Q16
Great math professor - Makes it make sense	He's great	Makes me like math	Make it not at night
Good communication	not needed	the material being taught	not needed
He is very knowledgeable of his content, and always provides opportunities for us to improve our understanding.	Return tests a little more quickly.	No unnecessary assignments.	Can't think of anything!
He is one of the sweetest men I know - I have never had a professor show me as much kindness as he does. This class was a blessing and I actually looked forward to this class every week!	I honestly cannot think of anything!	The help that I recieved inside and outside the class.	Nothing.
Subject	None	Teacher	None
Explains things very simply!		The professor - second chance test.	
Makes content understandable - Very funny and approachable.	N/A, he's great!	It makes math enjoyable!	N/A
great class!!	send out more emails	It was great!	email students more
Very knowledgeable, cares about his students and their success. Takes time to instruct students if they do not understand.		The material is easy to understand when instructed properly.	
Knowledge of material	I can't think of anything. Maybe a lesson?	the teacher and second chance tests	Have us make a lesson
knows material very well, good at explaining.	not needed	material is easy to understand	not needed
He knows the material.	I have no suggestions.	The instruction style of the teacher -	No suggestions.
He makes math easier to understand.	He is already very effective. Don't change anything.	Detailed/ visual examples.	I wouldn't change anything! The course was great.
knows [illegible]	[illegible]	[illegible]	Slow down, get to know [illegible] examples
He explained things well and in a way I could understand better.		I liked learning new ways to do certain math problems.	
His ability to help	Slow down and move away from the board so I can see	The instructor	Nothing
He is very knowledgeable in Math.	No suggestions.	It's my last class of the day -	No suggestions.
He knew the material.	Nothing. I liked the class.	I learned a lot.	Nothing. I liked the class.
Very knowledgeable	Don't drag on.		
He knew the material and was able to teach it well.	Don't go so in depth for somethings that many people know.	That he went over the material that was on tests and assignments	Allow more class time to do the assignments.
Makes the class enjoyable and provides a great learning environment.		His humor and the fact that he relates with students well	
Very prepared/ organized and knowledgeable of content. Friendly and helpful.		Course material is presented in a way that is easy to follow/learn. Daily quizzes helped boost my grade -	
[illegible] knows what he is talking about and [illegible] over the material until everyone understands.	He was very helpful and clear about the [illegible] the course.	[illegible]	[illegible]
Mrs. Fowlkes really cares about you and your grades. She is always welcome to help you whenever you need it.	She is great.	Math is my favorite subject.	I think it is great as it is.
Knowledgeable, and she truly wants us to understand the information. She "spend more time with us if we don't get something until we do.	Faster grading and giving back of exams.	I like using sketchpad	
He knew the material.	[illegible] just get our work and were dismissed. I would've liked to meet more often and [illegible] work [illegible]	I learned a lot.	Have more in-class assignments
He was very go at adapting the class to students needs		I liked the way it was set up.	
Allowed time for all assignments and was always available	n/a	I liked the online simulations and the different kinds of labs that we has to do. I also like how it lined up really well with the lecture	n/a
He encouraged the students to be interactive and tried to do more than just lecture at us	n/a	The variety of assignments	n/a
Able to present the information well.	None	I like learning about issues we see or hear about daily -	None
He is very intelligent and teaches with comfortability	Nothing. He responds to emails quickly - makes himself very accessible, wonderful professor	I learned a LOT. I liked science for the first time	Nothing, it was great
He's very knowledgeable of the class subject matter and he seems to really care about his students	Nothing, he's good	It's not just a boring class where no one cares or learns anything. He adjusts the pace and content according to how the class is understanding. He always keeps it interesting for us	Not hold it at 8am
Keeping it interesting		The project we did were helpful	
The class was very fun and interactive.	I cannot think of anything.	I went into the class thinking it would just be a class to push through to get out of the way but it was very enjoyable and I really enjoyed learning about the things we talked about.	
He knew the material.	Nothing. I liked the course -	Not many tests.	Nothing. I liked the course -
He is a very smart and caring professor -	There isn't much, I really enjoyed this class.	The labs were really fun and engaging	Nothing, it was an awesome class.
He is a very smart and caring professor -	There isn't much, I really enjoyed this class.	The labs were really fun and engaging	Nothing, it was an awesome class.
Dr. [illegible] really allowed all students to learn and begin to like or love biology	Maybe be consistent on what we can do for a test.	I loved that the biology is the beginning of the science classes.	NA
Dr. [illegible] really allowed all students to learn and begin to like or love biology	Maybe be consistent on what we can do for a test.	I loved that the biology is the beginning of the science classes.	NA
He is a very smart and caring professor.	There isn't much, I really enjoyed this class.	The labs were really fun and engaging	Nothing, it was an awesome class.
He is a very smart and caring professor -	There isn't much, I really enjoyed this class.	The labs were really fun and engaging	Nothing, it was an awesome class.

12	21 Biology & Lab	NATS 2204 1 16FA	School of Math and Science	4	4	4	4	4	4	4	4	4	4	4	4			
				4	4	4	4	4	4	4	4	4	4	4	4	Dr. Kihega really allowed all students to learn and begin to like or love biology	Maybe be consistent on what we can do for a test.	I loved that the biology is the beginning of the science classes.	NA
12	21 Biology & Lab	NATS 2204 1 16FA	School of Math and Science																
				4	4	4	4	4	4	4	4	4	4	4	4	Dr. Kihega really allowed all students to learn and begin to like or love biology	Maybe be consistent on what we can do for a test.	I loved that the biology is the beginning of the science classes.	NA
12	21 Biology & Lab	NATS 2204 1 16FA	School of Math and Science																
				3.954545	3.909091	3.909091	3.863636	3.863636	3.954545	3.863636	3.954545	3.954545	3.909091	3.909091	3.909091				

Total Number of Responses	Total Number Enrolled
60	162

	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
	3.72	3.70	3.68	3.68	3.66	3.54	3.66	3.64	3.64	3.66	3.68	3.68





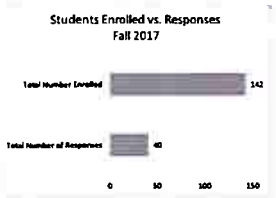
Top 3
1. The instructor was knowledgeable about the material cover
2. The instructor provided assistance as needed.
3. Test questions were clearly written and covered appropriat

Bottom 3
6. I received evaluation of assignments in a timely manner.
8. The assignments enhanced my learning in the course.
9. The course effectively integrated technology and Internet r

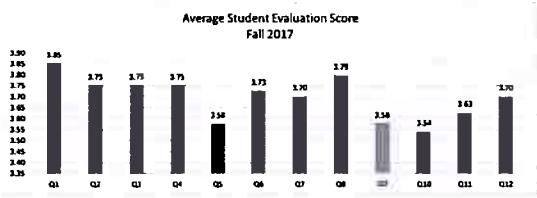
NumberOfResp	Enrollment	Course Title	Course Code	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	School Name
1	15	General Biology (non-majors)	NATS 1013 1 17SP		4	4	4	4	4	4	4	4	4	4	4	4	He knows v	He is effect	The things	Nothing.	School of Math and Sc
2	13	General Biology & Lab (non-majors)	NATS 1014 1 17SP		4	4	4	4	4	4	4	4	4	4	4	4	Very well p	N/A	The profes	N/A	School of Math and Sc
2	13	General Biology & Lab (non-majors)	NATS 1014 1 17SP		4	4	4	4	4	4	4	4	4	4	4	4	Very well p	N/A	The profes	N/A	School of Math and Sc
8	10	Math for Teachers I	MATH 2203 1 17SP		4	4	3	3	3	3	4	3	3	3	2	3	Very good	Idk	The class	Idk	School of Math and Sc
8	10	Math for Teachers I	MATH 2203 1 17SP		4	4	4	4	4	4	4	4	4	4	4	4	Notes, and	He does	wonderfull	Shouldn't ch	School of Math and Sc
8	10	Math for Teachers I	MATH 2203 1 17SP		4	4	4	4	4	4	4	4	4	4	4	4	Caring tow	Have the s	Helps my u	Use of calc	School of Math and Sc
8	10	Math for Teachers I	MATH 2203 1 17SP		4	4	4	4	4	4	4	4	4	4	4	4	Knows mat	Very affect	Get a lot of	Not neede	School of Math and Sc
8	10	Math for Teachers I	MATH 2203 1 17SP		4	4	4	4	4	4	4	4	4	4	4	4	He really knows the m	He makes math fun ar			School of Math and Sc
8	10	Math for Teachers I	MATH 2203 1 17SP		4	4	4	4	4	4	4	4	4	4	4	4	Very knowledgeable and relatable				School of Math and Sc
8	10	Math for Teachers I	MATH 2203 1 17SP		4	4	4	4	4	4	4	4	4	4	4	4	Knowledgeable				School of Math and Sc
8	10	Math for Teachers I	MATH 2203 1 17SP		4	4	4	4	4	4	4	4	4	4	4	4	Knows wh	N/A	I learned h	N/A	School of Math and Sc
2	15	College Math	MATH 1103 1 17SP		4	4	4	4	4	4	4	4	4	4	4	4	Will work v	The instruc	It's unders	Nothing to	School of Math and Sc
2	15	College Math	MATH 1103 1 17SP		4	4	4	4	4	4	4	4	4	4	4	4	He took hi	He is effect	Well its ma	Nothing	School of Math and Sc
2	17	College Algebra	MATH 1513 1 17SP		4	4	4	4	4	4	4	4	4	4	4	4					School of Math and Sc
2	17	College Algebra	MATH 1513 1 17SP		3	3	3	3	2	3	3	3	2	3	3	3	Experience	N/A	I liked whe	N/A	School of Math and Sc
16	7	Introduction to Statistics	MATH 3703 1 17SP		3	3	3	3	3	3	3	3	3	3	3	3					School of Math and Sc
16	7	Introduction to Statistics	MATH 3703 1 17SP		3	3	3	3	3	3	3	3	3	3	3	3	good	good	good	good	School of Math and Sc
16	7	Introduction to Statistics	MATH 3703 1 17SP		3	3	3	3	3	3	3	3	3	3	3	3		Help out	more, and not just wait		School of Math and Sc
16	7	Introduction to Statistics	MATH 3703 1 17SP		4	4	4	4	4	4	4	4	4	4	4	4	Knows material well		It's a cours	Nothing	School of Math and Sc
16	7	Introduction to Statistics	MATH 3703 1 17SP		3	3	3	3	3	3	3	3	3	3	3	3					School of Math and Sc
16	7	Introduction to Statistics	MATH 3703 1 17SP		3	3	3	3	3	3	3	3	3	3	3	3	good	good	good	good	School of Math and Sc
16	7	Introduction to Statistics	MATH 3703 1 17SP		3	3	3	3	3	3	3	3	3	3	3	3		Help out	more, and not just wait		School of Math and Sc
16	7	Introduction to Statistics	MATH 3703 1 17SP		4	4	4	4	4	4	4	4	4	4	4	4	Knows material well		It's a cours	Nothing	School of Math and Sc
1	9	College Algebra	MATH 1513 W1 17SP		4	4	4	4	4	4	4	4	4	4	4	4	Graded qu	I wouldn't	I liked the	I wouldn't	School of Math and Sc
3	3	Calculus II	MATH 2214 1 17SP		4	4	4	4	4	4	4	4	4	4	4	4	knows the material w	the instructor			School of Math and Sc
3	3	Calculus II	MATH 2214 1 17SP		4	4	4	4	4	2	4	4	4	4	4	4	Very kind	Grade in a timely manner			School of Math and Sc
3	3	Calculus II	MATH 2214 1 17SP		4	4	4	4	4	4	4	4	4	4	4	4	She knows	More writt	The conter	More hom	School of Math and Sc
4	5	Linear Algebra	MATH 3103 1 17SP		4	4	4	4	4	4	4	4	2	4	4	4	knew the material wel	the instructor			School of Math and Sc
4	5	Linear Algebra	MATH 3103 1 17SP		4	4	3	4	3	3	3	4	4	3	4	3	She has a way of show	Her witty c	Give us our		School of Math and Sc
4	5	Linear Algebra	MATH 3103 1 17SP		4	4	4	4	4	4	4	4	4	4	4	4	She was er	Less assign	The concer	Less assign	School of Math and Sc
4	5	Linear Algebra	MATH 3103 1 17SP		4	4	4	4	4	4	4	4	4	4	4	4	She knows	More hom	The conter	More hom	School of Math and Sc
1	1	Discrete Math	MATH 3403 II 17SP		4	4	4	4	4	4	4	4	4	4	4	4					School of Math and Sc
3	3	Differential Equations	MATH 4013 1 17SP		4	4	4	4	4	3	4	4	4	4	4	4					School of Math and Sc
3	3	Differential Equations	MATH 4013 1 17SP		4	4	4	4	4	4	4	4	4	4	4	4					School of Math and Sc
3	3	Differential Equations	MATH 4013 1 17SP		4	4	4	4	4	3	4	4	4	4	4	4	Knowledgeable and approachabl	Nothing, sl			School of Math and Sc
2	5	Mathematical Modeling	MATH 4113 1 17SP		4	4	4	4	4	4	4	4	4	4	4	4					School of Math and Sc
2	5	Mathematical Modeling	MATH 4113 1 17SP		4	4	4	4	4	4	4	4	4	4	4	4	Knows what she's doing and helps with learn				School of Math and Sc
					4	4	3.928571	4	3.928571	3.642857	3.928571	4	3.857143	3.928571	4	3.928571					
3	12	Biology I (majors)	BIOL 1214 1 17SP		4	4	4	4	4	4	4	4	4	4	4	4	Knowledge	Explain bet	Challengin	Explain bet	School of Math and Sc
3	12	Biology I (majors)	BIOL 1214 1 17SP		4	4	4	4	4	4	4	4	4	4	4	4	He did a gc	Some subj	I felt like I	The course	School of Math and Sc
3	12	Biology I (majors)	BIOL 1214 1 17SP		4	4	4	4	4	4	4	4	4	4	4	4	Very knowledgeable in the subjec		Snacks		School of Math and Sc
2	10	Human Anatomy and Physiology	BIOL 2314 1 17SP		4	4	4	4	4	4	4	4	4	4	4	4	This class i	The instruc	This course	Nothing th	School of Math and Sc
2	10	Human Anatomy and Physiology	BIOL 2314 1 17SP		4	4	4	4	4	4	4	4	4	4	4	4	He was ver	He could h	I felt like I	Give us mc	School of Math and Sc
1	8	Environmental Science Lab	NATS 2101 W1 17SP		4	4	4	4	4	4	4	4	4	4	4	4	Answered	Being mor	It was real	Make the l	School of Math and Sc
8	28	Environmental Science	NATS 2103 1 17SP		4	4	4	4	4	4	4	4	4	4	4	4	Makes assi	Can't be	Very intere	Its good	School of Math and Sc
8	28	Environmental Science	NATS 2103 1 17SP		1	1	1	1	1	1	1	1	1	1	1	1	Knows a lot about top	The work and content			School of Math and Sc
8	28	Environmental Science	NATS 2103 1 17SP		3	2	3	4	3	3	3	2	3	3	3	2	Kihega wa	Hold lectur	The video	Integrate n	School of Math and Sc

8	28 Environmental Science	NATS 2103 1 17SP	3	3	3	3	3	3	3	2	3	2	3	3	He knew al	Make sure It didn't re	Don't mak	School of Math and Sc
8	28 Environmental Science	NATS 2103 1 17SP	3	3	3	3	3	3	3	3	3	3	3	3	He was hel	Give a sch	I like what	Give a bett	School of Math and Sc
8	28 Environmental Science	NATS 2103 1 17SP	3	4	4	3	4	4	4	4	4	4	4	4	He was kn	He could h	It pertaine	Sometime	School of Math and Sc
8	28 Environmental Science	NATS 2103 1 17SP	3	3	3	3	3	3	3	3	3	3	3	3	na	na	na	na	School of Math and Sc
8	28 Environmental Science	NATS 2103 1 17SP	4	4	4	3	3	3	3	3	4	4	4	4	He knew tl	Give stude	I liked the	Give a revi	School of Math and Sc
1	1 Concepts of Physics	PHYS 1133 II 17SP	4	3	3	3	4	1	2	3	3	3	3	4	Knowledge	Teaching it.		I'd like to k	School of Math and Sc

Total Number of Responses	Total Number Enrolled
40	142



Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
3.85	3.75	3.75	3.75	3.58	3.73	3.70	3.79	3.58	3.54	3.63	3.70



Top 3
1. The instructor was knowledgeable about the material covered in the course.
2. The instructor provided assistance as needed.
8. The assignments enhanced my learning in the course.

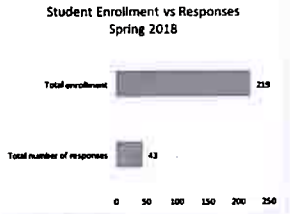
Bottom 3
5. The instructor encouraged applied learning by demonstrating how course concepts connect to professional and/
9. The course effectively integrated technology and Internet resources that contributed to learning.
10. The organization of the course was conducive to learning

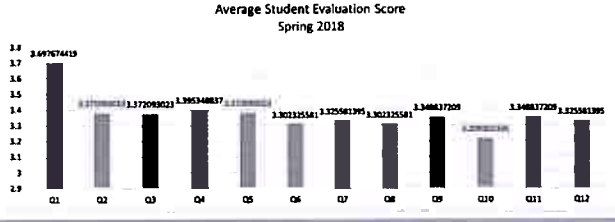
NumberOfResponse	Enrollment	Course Title	Course Code	School Name	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16
1	6	Algebra for Teachers	MATH 2103 1 17FA	School of Math and Science	4	4	4	4	4	4	4	4	4	4	4	4	4	He is a gre	Honestly h	I love matl NA
1	10	Math for Teachers II	MATH 2303 1 17FA	School of Math and Science	4	4	4	4	4	4	4	4	4	4	4	4	4	Very flexibl	NA	Very fun NA
1	8	College Algebra	MATH 1513 W1 17FA	School of Math and Science	2	3	3	3	2	4	3	3	4	3	3	3	3	It was onlir	The book i	I got an A The book mentioned above
2	9	Calculus I and Analytic Geometry	MATH 2114 1 17FA	School of Math and Science	4	4	4	4	4	4	4	4	4	4	4	4	4	She explair	The notes	It was easy I'm not sure that there was any way
2	9	Calculus I and Analytic Geometry	MATH 2114 1 17FA	School of Math and Science	4	4	3	4	4	3	3	4	4	4	3	3	4	Very know	Post grade	The extra g Allow for test corrections. When I take a test I make little mistakes and sometimes my bra
2	5	Calculus III	MATH 2313 1 17FA	School of Math and Science	4	4	4	4	4	4	4	4	4	4	4	4	4	Explaining the materi	How small he class sizes are	
2	5	Calculus III	MATH 2313 1 17FA	School of Math and Science	4	4	4	4	4	4	4	4	4	4	4	4	3	smart and	no idea	It was challno idea
5	8	Discrete Math	MATH 3403 1 17FA	School of Math and Science	3	4	4	4	3	4	4	4	4	2	3	4	charisma, i	-	It was fun	I give less quantity of homework and focus more on quality and more complicated homew
5	8	Discrete Math	MATH 3403 1 17FA	School of Math and Science	4	4	4	4	4	3	3	4	3	3	3	4				
5	8	Discrete Math	MATH 3403 1 17FA	School of Math and Science	4	4	4	4	4	4	4	4	4	4	4	4	4	She knows	none	the instruc none
5	8	Discrete Math	MATH 3403 1 17FA	School of Math and Science	3	3	3	3	3	3	3	3	3	3	3	3	3			
5	8	Discrete Math	MATH 3403 1 17FA	School of Math and Science	4	4	4	4	4	4	4	4	4	4	4	4	4	Clarity of e	N/A	I like the m N/A
12	21	Biology I (majors)	BIOL 1214 1 17FA	School of Math and Science	4	4	3	4	4	4	4	4	4	4	4	3	4	Very know	He should	I'd,Ei chalke More hands on examples might be good? Like models for the different things like cells, mi
12	21	Biology I (majors)	BIOL 1214 1 17FA	School of Math and Science	4	4	4	3	3	3	4	4	3	3	4	4	4	knowledge	Be more d	macromole none.
12	21	Biology I (majors)	BIOL 1214 1 17FA	School of Math and Science	4	4	4	4	4	4	4	4	4	4	4	4	4	As an instr	Use more g	The materi I like worksheets!
12	21	Biology I (majors)	BIOL 1214 1 17FA	School of Math and Science	4	4	4	4	4	4	4	4	4	4	4	4	4	He managed to make		I just love biology
12	21	Biology I (majors)	BIOL 1214 1 17FA	School of Math and Science	4	4	4	4	4	4	4	4	4	4	4	4	4	He managed to make		I just love biology
12	21	Biology I (majors)	BIOL 1214 1 17FA	School of Math and Science	4	4	3	4	3	4	4	4	4	4	4	3	4			
12	21	Biology I (majors)	BIOL 1214 1 17FA	School of Math and Science	4	4	4	4	3	4	4	4	3	3	3	3	3	He explain	Honestly, f	It teaches s More labs.
12	21	Biology I (majors)	BIOL 1214 1 17FA	School of Math and Science	4	3	3	3	3	3	3	3	3	3	3	3	2	Knows wh	Better corr	The class d More one on one time
12	21	Biology I (majors)	BIOL 1214 1 17FA	School of Math and Science	4	4	4	4	4	3	3	3	3	3	3	3	3	He is very	If he explai	It was very Give more time to thoroughly learn the things we discussed.
12	21	Biology I (majors)	BIOL 1214 1 17FA	School of Math and Science	3	3	4	4	4	4	3	4	3	3	4	4	4	He provide	Informatio	It has giver I would like to have a bit longer to complete assignments.
12	21	Biology I (majors)	BIOL 1214 1 17FA	School of Math and Science	4	3	3	3	3	3	3	3	3	3	3	3	2	Knows wh	Better corr	The class d More one on one time
12	21	Biology I (majors)	BIOL 1214 1 17FA	School of Math and Science	4	3	3	2	1	3	3	3	2	3	1	1	3	Very know	His needs t	I like the cl A better lab setup. Having REAL labs, not that online b.s.
5	11	General Zoology	BIOL 2114 1 17FA	School of Math and Science	4	3	3	2	3	2	3	3	2	2	4	4	4	He is know	He needs t	The dissect The course needed to be better organized
5	11	General Zoology	BIOL 2114 1 17FA	School of Math and Science	4	4	4	4	4	4	4	4	4	4	4	4	4			
5	11	General Zoology	BIOL 2114 1 17FA	School of Math and Science	4	4	4	4	4	4	4	4	4	4	4	4	4	Willing to help and tea		Learning al Snacks
5	11	General Zoology	BIOL 2114 1 17FA	School of Math and Science	4	4	4	4	4	4	4	4	4	4	4	4	4	As an instr	Maybe mo	The conter Not much. More worksheets for reference?
5	11	General Zoology	BIOL 2114 1 17FA	School of Math and Science	4	4	4	4	4	4	4	4	4	4	4	4	4	The instruc	The instruc	I like all the This course was great just how it was.
7	14	Human Anatomy and Physiology I	BIOL 2314 1 17FA	School of Math and Science	4	4	4	4	4	4	4	4	4	4	4	4	4	He is good	If he explai	I got to lea To explain things more clearly to where we can understand what he is talking about.
7	14	Human Anatomy and Physiology I	BIOL 2314 1 17FA	School of Math and Science	4	4	4	4	4	4	4	4	3	4	4	4	4	He is very	He is effect	I learned a This course doesn't need improvement, it was great.
7	14	Human Anatomy and Physiology I	BIOL 2314 1 17FA	School of Math and Science	4	4	4	4	4	4	4	4	4	4	4	4	4	Dr. Khega	Offer study	I am fascin Added study sessions for tests and quizzes.
7	14	Human Anatomy and Physiology I	BIOL 2314 1 17FA	School of Math and Science	4	4	4	4	4	4	4	4	4	4	4	4	4	Very knowledgeable o		Learning al Snacks
7	14	Human Anatomy and Physiology I	BIOL 2314 1 17FA	School of Math and Science	4	4	4	4	4	4	4	4	4	4	4	4	4	Made sure we knew what we were doing and helped you when you needed it		
7	14	Human Anatomy and Physiology I	BIOL 2314 1 17FA	School of Math and Science	4	3	4	4	4	4	4	3		3		4	3	Knowledgeable		Learning as More time to study
7	14	Human Anatomy and Physiology I	BIOL 2314 1 17FA	School of Math and Science	4	4	4	4	3	4	4	4	4	3	4	4	4			
1	22	Environmental Science Lab	NATS 2101 1 17FA	School of Math and Science	4	4	4	4	4	4	4	4	4	4	4	4	4			
3	28	Environmental Science	NATS 2103 1 17FA	School of Math and Science	4	4	4	4	4	4	4	4	4	4	4	4	4			
3	28	Environmental Science	NATS 2103 1 17FA	School of Math and Science	3	2	3	3	2	3	3	3	3	3	3	3	3			Do video lectures over instead of saying the tests will be over a lot of chapters, explain the material that will be a
3	28	Environmental Science	NATS 2103 1 17FA	School of Math and Science	4	4	4	4	3	4	4	4	4	4	4	4	4	Always ready to answ	Very real information that is current and necessary to know in today's time.	
					3.85	3.75	3.75	3.75	3.575	3.725	3.7	3.794872	3.575	3.538462	3.625	3.7				
										40										

3.538462
3.85

Total number of responses	Total enrollment
43	219

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
3.70	3.37	3.37	3.40	3.37	3.30	3.33	3.30	3.35	3.21	3.35	3.33





Top 3
1. The instructor was knowledgeable about the material covered in the course.
2. The instructor provided assistance as needed.
4. Instructions and expectations for assignments were clear.

Bottom 3
5. The instructor encouraged applied learning by demonstrating how course concepts connect to
8. The assignments enhanced my learning in the course.
10. The organization of the course was conducive to learning.

NumberOfResponses	Enrollment	Course Tit	Course Cod	School Nan	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16
6	2	General Bic	NATS 1014	School of N	3	3	3	2	3	3	3	2	3	2	2	3	She knew v	She could'v	She didn't s	Instead of online labs, just do labs in class for all of them.
6	2	General Bic	NATS 1014	School of N	4	3	3	3	4	3	3	3	3	3	4	3				
6	2	General Bic	NATS 1014	School of N	3	3	3	3	3	3	3	3	3	2	3	3	Really flexil	Be more organized anc	A better organized curriculum. We also did not meet a lot it feels like, so we did not get as m	
6	19	General Bic	NATS 1014	School of N	3	3	3	2	3	3	3	2	3	2	2	3	She knew v	She could'v	She didn't s	Instead of online labs, just do labs in class for all of them.
6	19	General Bic	NATS 1014	School of N	4	3	3	3	4	3	3	3	3	3	4	3				
6	19	General Bic	NATS 1014	School of N	3	3	3	3	3	3	3	3	3	2	3	3	Really flexil	Be more organized anc	A better organized curriculum. We also did not meet a lot it feels like, so we did not get as m	
1	19	College Ma	MATH 110	School of N	4	4	4	4	3	3	2	4	2	4	4	4	Helped in a	Allow even	So clear an	N/A
2	10	College Alg	MATH 151	School of N	4	4	4	4	4	4	3	3	2	3	3	3				
2	10	College Alg	MATH 151	School of N	4	4	4	4	4	4	4	4	4	4	4	4	Very helpfu	No comme	The instruc	Nothing.
2	11	College Alg	MATH 151	School of N	4	4	4	4	4	4	4	4	4	4	4	4	She was ve	It is online -	It was quicl	Nothing at this point.
2	11	College Alg	MATH 151	School of N	4	4	4	4	4	4	4	4	4	4	4	4	She was qu	By being m	It's super fl	Not having a discussion in week 1
3	6	Calculus II	MATH 221	School of N	4	4	3	4	3	3	4	4	3	3	4	4	She is awa	N/A	The profes	N/A
3	6	Calculus II	MATH 221	School of N	4	4	4	3	3	3	3	3	3	3	3	3				
3	6	Calculus II	MATH 221	School of N	4	4	4	4	4	3	3	3	3	3	4	4	Very knowledgeable al	That we ge	I really like the tests being on Mondays, that way we don't have chapel afterwards and I can	
1	15	Business M	MATH 250	School of N	4	4	4	4	4	4	4	4	4	4	4	4	N/A	N/A	N/A	N/A
1	4	Linear Alge	MATH 310	School of N	4	4	4	4	4	3	4	4	4	4	4	4				
4	9	Introductio	MATH 370	School of N	4	4	3	4	4	4	4	4	4	4	3	3	They are gc	The instruc	The course	The course was downstairs in the library. Most of us have computers, so I would have liked it
4	9	Introductio	MATH 370	School of N	4	4	4	4	4	4	4	3	3	3	3	3				
4	9	Introductio	MATH 370	School of N	4	4	4	4	4	4	4	3	4	4	4	4	She's good	At making s	Professor Fowlkes taught it really well	
4	9	Introductio	MATH 370	School of N	4	4	4	4	4	4	4	4	4	4	4	4	She knows	She is grea	I like the ex	The course is great
3	5	Abstract Al	MATH 410	School of N	4	4	3	3	3	3	3	3	3	3	3	3	She nice an	To abstract	The profes	N/A
3	5	Abstract Al	MATH 410	School of N	4	4	4	4	4	4	4	4	4	4	4	4	She knows	No critique	The thoughi	No critique
3	5	Abstract Al	MATH 410	School of N	4	4	3	4	3	3	4	4	4	4	4	4	knowledge	of the material		
5	12	Biology II (	BIOL 1314	School of N	3	3	3	3	3	3	3	3	4	4	3	3				
5	12	Biology II (	BIOL 1314	School of N	4	4	3	4	3	3	3	4	4	4	4	4	Know what	Extra credi	Most of thi	If we had more group work I would like it to be done mostly in class. The people that I sharec
5	12	Biology II (	BIOL 1314	School of N	4	3	3	3	3	3	3	3	3	3	3	3	He was will	What coulc	This course	This course could be improved by having more lectures with more fill in the blanks where yo
5	12	Biology II (	BIOL 1314	School of N	4	2	4	4	4	4	4	3	3	3	3	4	Harold is la	Harold sho	Learning at	Not as much busy, book work.
5	12	Biology II (	BIOL 1314	School of N	4	4	4	4	4	4	4	4	4	4	4	4	He is know	No comme	The conten	Nothing.
2	10	Biology II (	BIOL 1314	School of N	4	3	3	3	4	4	3	4	3	3	3	3	Detailed kn	Convey knc	It is challen	A bit more organization for labs and a reason for heading up to the school stronger than just
2	10	Biology II (	BIOL 1314	School of N	4	3	3	3	3	3	3	3	3	3	3	3				
3	18	Human Ana	BIOL 2324	School of N	4	4	4	4	4	4	4	4	4	4	4	4	They are gc	There need	I liked how	To improve this course I would suggest there be more lecturing and let hand outs. It was han
3	18	Human Ana	BIOL 2324	School of N	4	3	3	4	3	3	3	2	3	3	3	3	Being in th	Having less :	Learning st	Helping everyone equally and making sure that everyone is given the same opportunity to ge
3	18	Human Ana	BIOL 2324	School of N	4	2	3	3	3	4	2	4	3	4	4	2	Knowledge	Harold should	not blatantly	show nepotism or change the course in the middle of the semester, for certain sports te
1	17	Environme	NATS 2101	School of N	4	4	4	4	4	4	4	4	4	4	4	4	Effective in	Less homev	Online	Less homework
2	16	Environme	NATS 2101	School of N	3	3	3	3	3	3	3	3	3	3	3	3				
2	16	Environme	NATS 2101	School of N	3	3	3	2	2	1	3	3	4	1	2	2	Knowledge	Better at ar	It was onlir	Everything on #14
2	20	Environme	NATS 2103	School of N	3	3	3	3	3	3	3	3	3	3	3	3	I have no cl	Only provic	I could use	Only provide it for sit down
2	20	Environme	NATS 2103	School of N	4	4	4	4	4	4	4	4	4	4	4	4	Effective in	Less homev	Online	Less homework
3	27	Environme	NATS 2103	School of N	3	3	3	1	3	3	3	2	3	3	3	3	2			
3	27	Environme	NATS 2103	School of N	3	3	3	3	3	3	3	3	3	3	3	3	3			
3	27	Environme	NATS 2103	School of N	3	1	3	2	2	1	3	3	4	1	2	2	Knowledge	Better at ar	I liked the c	Everything on #14
2	18	Chemistry I	CHEM 1101	School of N	3	3	2	2	2	3	3	3	3	3	3	3	The second	The instruc	I liked that	To improve this course it would be nice to keep one teacher that knows what he/she knows
2	18	Chemistry I	CHEM 1101	School of N	3	3	2	3	2	3	3	2	2	2	1	3	The first in	The first in	There was	Build our own lab and invest in a real chem teacher. We need this information to graduate a

Mathematics B.S., Program Review, Section 9

Curriculum Reviews

Course	Title	Revision	Status
MATH 3303	History of Math	Revised Final Essay Rubric	In Process – no new results
MATH 4003	College Geometry I	Revising Final Proof Portfolio Rubric	In process
MATH 4113	Mathematical Modeling	Biology topics added	In process

Mathematics B.S., Program Review, Section 10

Retention/Persistence Rates

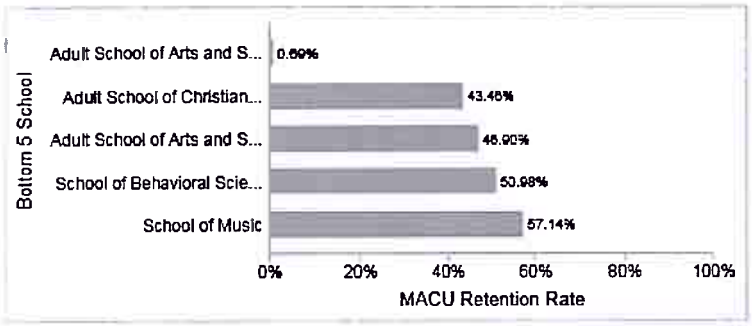
ACADEMIC_YEAR:

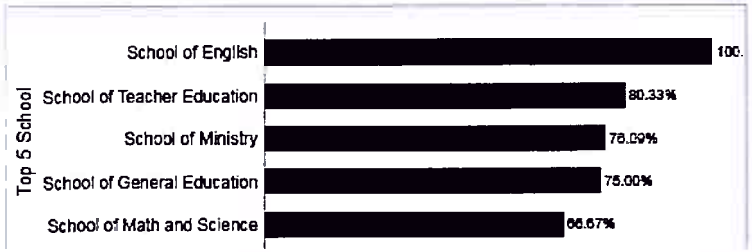
2017-2018

Unduplicated Enrollment

2026

The current retention rate and its changing trend*





Overall Retention Rate

▲ .13 **57.01%**

Undergraduate Overall

▲ 1.27 54.88%

Graduate Overall

▼ -4.22 64.48%

CAS-Undergraduate

▼ -.86 68.50%

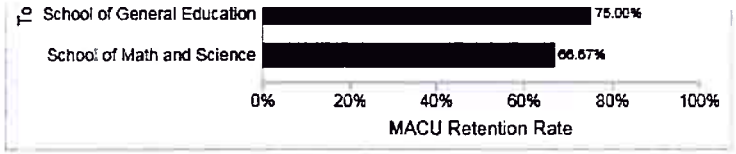
CAGS-Graduate

▼ -4.22 64.48%

CAGS-Undergraduate

▲ .57 49.85%

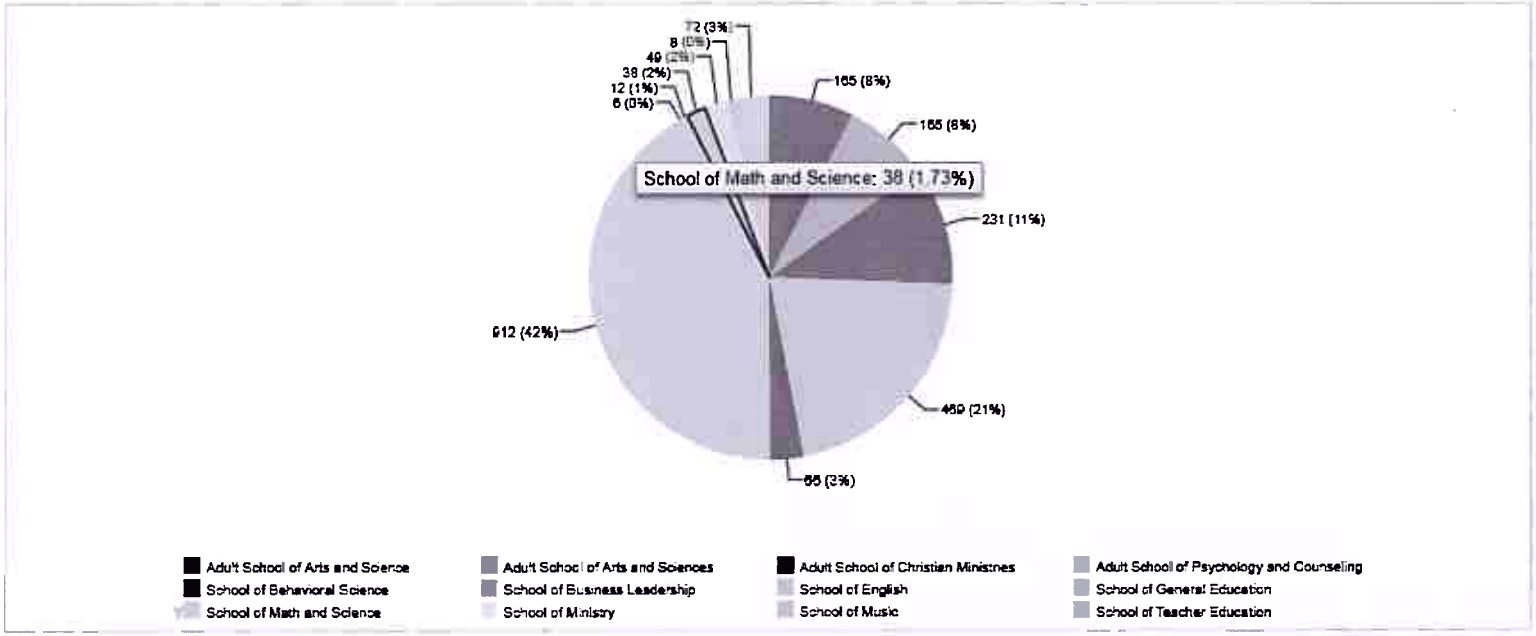
StockFlags - Retention Comparison in Academic Year V4

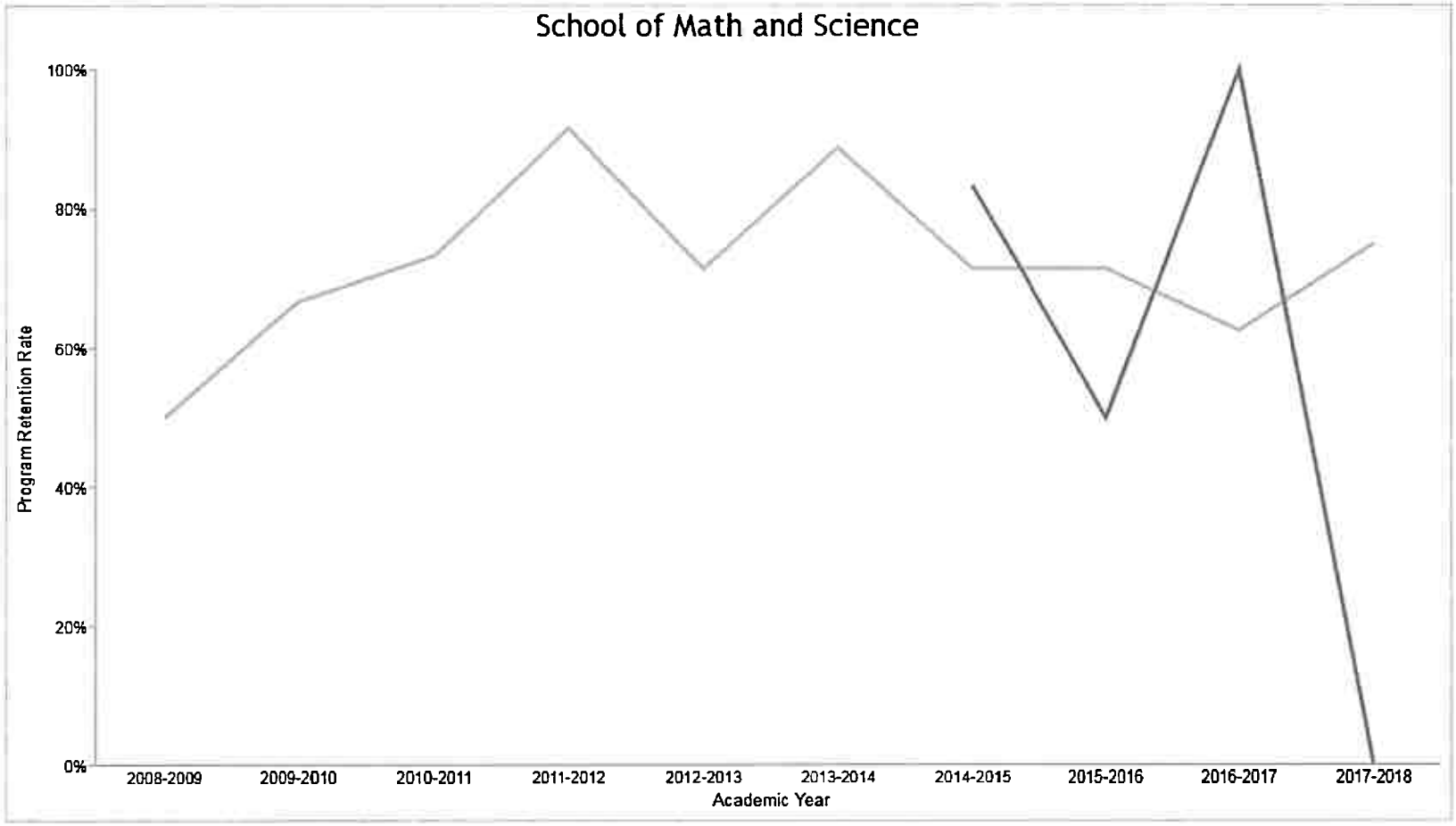


▲ .57 49.85%

* The percentages below mean the actual percent of Retention Rate and the numeber of its changes

Enrollment Distribution by Schools




School of Math and Science
100%
80%
60%
40%
20%
0%
Program Retention Rate
2008-2009
2009-2010
2010-2011
2011-2012
2012-2013
2013-2014
2014-2015
2015-2016
2016-2017
2017-2018
Academic Year

Mathematics B.S., Program Review, Section 11

Instructor/Faculty Evaluations

Mathematics B.S., Program Review, Section 12

University Senate Documents Related to Program

Faculty/Senate Checklist – CHANGES *(New or Revised Courses/Curriculum Components)*

MACU Faculty/Senate Policy Rev. 8/15/15 Do not change wording on this form

PURPOSE: Request for Approval of Curriculum Revisions

Curriculum proposal for: _____

Submitted by: _____ College/School _____

Process to request approval of a new degree/emphasis/certificate program:

- Fill out the attached Faculty/Senate Proposal form. *Note: this form is not for use to change an existing program into a new degree or emphasis. (approval to develop is not required for any items on this list)*
- Submit your completed proposal and required documentation to the persons listed below for signatures. You may email your proposal to reviewers and attach the email responses to this form – keeping in mind the required approval order.
- Proposals with all required signatures should be submitted for inclusion on the Faculty agenda a minimum of 7 days prior to the scheduled meeting.
- Submit your proposal and all supporting documents to the Dean in one electronic Word file. No PDF documents.

Curriculum components **Requested change for:**	**What is needed** *(show changes in strikeout and highlights format, e.g., ~~old~~ and **new** format) Use the MACU Catalog for information and format examples*
Admission requirements Course description Degree Program name Program description Program outcomes	Submit your completed proposal form showing all revised or new information.
Course (information changes)	Submit your completed proposal form and revised degree evaluation form *(if applicable)* (A course change includes changes in name, department, prefix, number, level, pre-requisites, and credit hours)
Course (new)	Submit proposal form with course name, prefix, and course description and (CAS) semester rotation and/or (CAGS) length of course use catalog format) and revised degree evaluation form *(if applicable)*
Degree evaluation form *(degree sheet)*	Submit your completed proposal form and revised degree evaluation form (the University Registrar or VPAA Office will assist with these changes)

Required Signatures

1. **Obtain all signatures IN THE ORDER LISTED for purpose of appropriate collaboration, communication and approval.**
2. **The signature form must always accompany your proposal. You can expect revisions at all levels of review.**
3. **Changes requested at any level below should be made before you receive that reviewer's signature.**
4. **Upon completion of signatures the VPAA will retain this sheet and send final electronic copies to you and College Dean.**

Approved: School Chair/Program Director	Date	*Comments*
Approved: College Dean	Date	*Comments*
Approved: Vice President for CAGS (CAGS Only)	Date	*Comments*
Approved: Marketing Representative –CAGS *or* Assist. V.P. Enrollment Services – CAS	Date	*Comments*
Approved: University Registrar	Date	*Comments*
Approved: Chief Financial Officer	Date	*Comments*
Approved: Executive Director of Assessment, Accreditation and Institutional Research	Date	*Comments*
Approved: Vice President for Academic Affairs	**Date**	***Comments***

Proposal Request to Make Changes to Existing Curriculum or for new courses: *(state primary area of change – name of revised degree, new or revised course, etc.)*	**Proposal to Change: Course descriptions for MATH and NATS courses**

Proposal to Change - ***explain revisions and actions*** *being requested (show changes in strikeout and highlights, e.g., ~~old~~ and **new** format)*

Course description changes for MATH 1103 College Math and MATH 4203 Mathematical Statistics
Prerequisite changes to: MATH 1303 Plane Trigonometry, MATH 1513 College Algebra, MATH 2114 Calculus 1, MATH 3403 Discrete Math, MATH/BUAD/PSYC 3703 Introduction to Statistics, MATH 4013 Differential Equations, MATH 4103 Abstract Algebra
Course rotation updates

Rationale *(information supporting proposal – why you are making changes)*

Changes made to course descriptions to align with Course Equivalency Program. Revised prerequisites and course rotations to reflect changes made to program based on assessment analysis.

Other information ***(show new courses, course description changes, etc.)***

MATH 1103 College Math (3 cr.) **Exploration of various topics designed to give the student an appreciation of mathematics and to expose the student to mathematical problems within numerous disciplines.** ~~The study of essential arithmetic, intermediate algebra and geometry, including a survey of linear equations, polynomials, algebraic fractions and quadratic equations. Emphasis is given to problem solving and the practical application of mathematical concepts. (This course may not meet the general math requirement of other colleges for students intending to transfer from MACU.)~~ Prerequisite: ACT score of 16 or above. Offered every semester.

MATH 1303 Plane Trigonometry (3 cr.) In the first part of this course, properties of triangles and trigonometric functions and their applications are explored. Topics include: trigonometric functions, identities, graphs, inverses, and laws. In the second part of this course, a graphical approach to functions will be explored with extensive use of graphing calculators to explore problems and solutions, not just rote memorization. Problem-solving techniques and the programming of graphing calculators will also be taught. Prerequisite: ACT Math score of **18**. Offered **every fall**.

MATH 1513 College Algebra (3 cr.) This course is a study of the processes of algebra, polynomials, algebraic fractions, graphing linear systems. It is designed for students planning to major in business and natural science programs. Prerequisite: ACT Score of **22** or above or complete MATH 1103 with a grade of "B" or approval of Instructor. Offered every semester

MATH 2103 Algebra for Teachers (3 cr.) The elementary major will be presented with a tactile approach to Algebraic concepts. Students will reason mathematically, solve problems, and encourage full participation, design and present lessons that use the hands-on approach to teaching an algebraic concept. Students will develop portfolios and grade lab homework. The (**NCTM**) standards are presented and explored. Offered every fall semester.

MATH 2114 Calculus I and Analytic Geometry (4 cr.) An introduction to the basic concepts of Calculus including limits, derivatives and integrals using graphical, numerical, recurrence relations and symbolic points of view. Emphasis will be placed on using Calculus in problem solving and problem solving techniques will be taught. (lab included) Prerequisites: **MATH 1513 or high school** credit for Calculus. Offered every **fall**.

MATH 3103 Linear Algebra (3 cr.) A study of the generalization of the properties of straight lines. Topics include: linear equations, matrices, determinants, vectors, vector spaces, linear transformations, eigenvalues and eigenvectors. Prerequisite: MATH **1513**. Offered every spring.

MATH 3403 Discrete Math (3 cr.) An introduction to the fundamental ideas of discrete mathematics and a foundation for the development of more advanced mathematical concepts. Some topics covered include: Number Theory, Sets and operations on sets, logic, permutations and combinations, functions, trees, graph theory and groups. Prerequisite: MATH **1513**. Offered **fall** semester: **odd** numbered years.

MATH/BUAD/PSYC 3703 Introduction to Statistics (3 cr.) The course is a complete introduction to basic statistics as a method of analysis. Statistics is a powerful tool that is used in the business world and in the behavioral science area extensively. This course will provide the student with a working knowledge of statistical terms and formulas. The student will use Microsoft Excel as the medium technology throughout the course. Microsoft Excel spreadsheet program is required for this course. **Prerequisite: MATH 1513**. Offered every semester.

MATH 4003 College Geometry I (3 cr.) This course is designed to be a "voyage" through plane geometry and its various branches. The student will be introduced to properties of axiomatic systems and investigate each system. Discussions on Euclidean and non-Euclidean Geometries will be included. Extensive use of Geometer's Sketchpad software will be required with several laboratory investigations. Prerequisite: MATH 2313. Offered **fall** semester: even numbered years.

MATH 4013 Differential Equations (3 cr.) Ordinary differential equations of first order, higher order linear equations, Laplace transform methods, series methods; numerical solution of differential equations. Application to physical sciences and engineering. Prerequisite: MATH **2313**. Offered **spring semester: odd numbered years.**

MATH 4103 Abstract Algebra (3 cr.) A study of three themes: arithmetic, congruence, and abstract structures which are developed for integers, polynomials, rings and groups. Numbers, number theory and number systems will be taught. Prerequisite: MATH **3403**. Offered **spring** semester: **even** numbered years.

MATH 4113 Mathematical Modeling (3 cr.) Mathematical modeling is a mathematical tool for solving real world problems. In this course students study a problem-solving process. They learn how to identify a problem, construct or select appropriate models, figure out what data needs to be collected, test the validity of a model, calculate solutions and implement the model. Emphasis lies on model construction in order to promote student creativity and demonstrate the link between theoretical mathematics and real world applications. Prerequisite: MATH 2313. Offered **spring semester: odd numbered years.**

MATH 4203 Mathematical Statistics (3 cr.) **A study of combinatorics; probability, random variables, discrete and continuous distributions, generating functions, moments, special distributions, multivariate distributions, independence, distributions of functions of random variables, hypothesis testing, analysis of variance, and regression** . Prerequisites: MATH 3703 and MATH 2313. Offered fall semester: odd numbered years.

MATH 4303 College Geometry II (3 cr.) This course is designed to be a "voyage" through plane geometry and its various branches. The student will be introduced to properties of axiomatic systems and will investigate each system, **including rings and groups**. Discussions on non-Euclidean geometries will be included. Extensive use of Geometer's SketchPad software will be required with several laboratory investigations. Prerequisite: MATH 4003. Offered spring semester: odd numbered years.

NATS [Natural Science]
NATS 2101 Earth Science Lab (1 cr.) Designed to provide more in depth understanding and hands-on experiences relevant to the basic principles of physical science as applied to our solar system, the universe, geology, oceanography, and weather. Offered every semester.

NATS 2103 Earth Science (3 cr.) An introductory study of the basic principles of physical science as applied to our solar system, the universe, geology, oceanography, and weather. Offered every semester.

NATS 2201 Biology Lab (1 cr.) Laboratory experiences designed to facilitate understanding of the biological concepts principles studied in NATS 2203. A **one** hour lab session each week. **Offered every semester**

NATS 2203 Biology (3 cr.) A study of past and present concepts regarding the origin, growth, reproduction, structure, genetics, evolution, and interrelations of biological life. Offered every semester

Correlation to the Assessment System & Program Improvement

Changes were made because of assessment system analysis and to improve program by making courses transferrable.

Budget and Correlation to Strategic *Planning* *(include additional adjunct or any other expected costs)*

No budget changes

Other (Attach all pertinent degree program evaluation forms showing revisions *with strikeout and highlights, e.g., ~~old~~ and **new** format)*

SUBMITTED BY: • **Name/Title** • **College/School**	Carol Fowlkes, Chair of the School of Math and Science College of Arts and Sciences/School of Math and Science
Proposed Effective Date:	As Approved

Faculty/Senate Checklist – CHANGES *(New or Revised Courses/Curriculum Components)*

MACU Faculty/Senate Policy Rev. 8/15/15 Do not change wording on this form

MATH 4003 College Geometry I (3 cr.) This course is designed to be a "voyage" through plane geometry and its various branches. The student will be introduced to properties of axiomatic systems and investigate each system. Discussions on Euclidean and non-Euclidean Geometries will be included. Extensive use of Geometer's Sketchpad software will be required with several laboratory investigations. Prerequisite: MATH 2313. Offered fall semester: even numbered years.

Deleted: spring

MATH 4013 Differential Equations (3 cr.) Ordinary differential equations of first order, higher order linear equations, Laplace transform methods, series methods; numerical solution of differential equations. Application to physical sciences and engineering. Prerequisite: MATH 2313. Offered spring semester: odd numbered years.

Deleted: 2214 and MATH 3103

Deleted: on demand

MATH 4103 Abstract Algebra (3 cr.) A study of three themes: arithmetic, congruence, and abstract structures which are developed for integers, polynomials, rings and groups. Numbers, number theory and number systems will be taught. Prerequisite: MATH 3403. Offered spring semester: even numbered years.

Deleted: 2313

Deleted: fall

Deleted: odd

MATH 4113 Mathematical Modeling (3 cr.) Mathematical modeling is a mathematical tool for solving real world problems. In this course students study a problem-solving process. They learn how to identify a problem, construct or select appropriate models, figure out what data needs to be collected, test the validity of a model, calculate solutions and implement the model. Emphasis lies on model construction in order to promote student creativity and demonstrate the link between theoretical mathematics and real world applications. Prerequisite: MATH 2313. Offered spring semester: odd numbered years.

Deleted: on demand

MATH 4203 Mathematical Statistics (3 cr.) A study of combinatorics; probability, random variables, discrete and continuous distributions, generating functions, moments, special distributions, multivariate distributions, independence, distributions of functions of random variables, hypothesis testing, analysis of variance, and regression. Prerequisites: MATH 3703 and MATH 2313. Offered fall semester: odd numbered years.

Deleted: Introduction to statistical analysis including populations, samples, descriptive statistics, regression, correlation, probability, discrete and continuous distributions, sampling methods, estimation, hypothesis testing, and analysis of variance

MATH 4303 College Geometry II (3 cr.) This course is designed to be a "voyage" through plane geometry and its various branches. The student will be introduced to properties of axiomatic systems and will investigate each system, including rings and groups. Discussions on non-Euclidean geometries will be included. Extensive use of Geometer's SketchPad software will be required with several laboratory investigations. Prerequisite: MATH 4003. Offered spring semester: odd numbered years.

NATS [Natural Science]

NATS 2101 Earth Science Lab (1 cr.) Designed to provide more in depth understanding and hands-on experiences relevant to the basic principles of physical science as applied to our solar system, the universe, geology, oceanography, and weather. Offered every semester.

Deleted: fall

NATS 2103 Earth Science (3 cr.) An introductory study of the basic principles of physical science as applied to our solar system, the universe, geology, oceanography, and weather. Offered every semester.

Deleted: fall

NATS 2201 Biology Lab (1 cr.) Laboratory experiences designed to facilitate understanding of the biological concepts principles studied in NATS 2203. A one hour lab session each week. Offered every semester

Deleted: two

NATS 2203 Biology (3 cr.) A study of past and present concepts regarding the origin, growth, reproduction, structure, genetics, evolution, and interrelations of biological life. Offered every semester

Deleted: spring

Correlation to the Assessment System & Program Improvement

Changes were made because of assessment system analysis and to improve program by making courses transferrable.

Budget and Correlation to Strategic *Planning (include additional adjunct or any other expected costs)*

No budget changes

Other (Attach all pertinent degree program evaluation forms showing revisions *with strikeout and highlights, e.g., old and new format)*

SUBMITTED BY: • **Name/Title** • **College/School**	Carol Fowlkes, Chair of the School of Math and Science College of Arts and Sciences/School of Math and Science
Proposed Effective Date:	As Approved

Mathematics B.S., Program Review, Section 13

External Review Documents (Advisory Boards, OEQA, etc.)

STATE OF OKLAHOMA
RECOGNITION REPORT ON
THE PREPARATION OF MATHEMATICS TEACHERS

This is: ☒ an existing program ☐ a new program

This report is in response to a(n):

☒ Initial Review ☐ Revised Report ☐ Response to Condition

Institution: Mid-America Christian University

Review Date: 11/3/2017

Program(s) Covered by this Review:	Program Type:	Award or Degree Level(s):
	☒ Initial teacher license in field ☐ Advanced program leading to another professional role	**Initial** ☒ Baccalaureate ☐ Post baccalaureate ☐ Initial Master's ☐ Endorsement, Certificate, or License (specify) ____ **Advanced** ☐ Master's ☒ Post Master's ☐ Specialist ☐ Doctorate ☐ Endorsement, Certificate, or License (specify) ____

PART A—RECOGNITION DECISION (see Section G for specifics on decision)

A.1—Decision on recognition of the program(s):

☐ Recognized
☒ Recognized with conditions
☐ Recognized with probation – *previously recognized program*
☐ Further development required – *program not previously recognized*
☐ Not recognized* - *third or subsequent submission*

A program can receive a decision of **Not Recognized only after two submissions are unsuccessful in reaching either Recognized or Recognized with Conditions.*

A.2—Test Results (from information supplied in Assessment #1)

The program meets or exceeds an 80% pass rate on state licensure exams:

☐ Yes ☐ No ☐ Not applicable ☐ Not able to determine

Comments:

A.3—Summary of Strengths: The report includes a good group of assessements that work together to meet the NCTM standards. Strong content courses are included in the program.

PART B—STATUS OF MEETING STATE STANDARDS

M = Met NM = Not Met MWC = Met with Conditions
PM = Potential to Meet (for new programs with no data)

Standard	Specific Program or Level[2]	Specific Program or Level
Standard 1: Content Knowledge Effective teachers of secondary mathematics demonstrate and apply knowledge of major mathematics concepts, algorithms, procedures, connections, and applications within and among mathematical content domains.		
Standard 1.1: Demonstrate and apply knowledge of major mathematics concepts, algorithms, procedures, applications in varied contexts, and connections within and among mathematical domains (Number, Algebra, Geometry, Trigonometry, Statistics, Probability, Calculus, and Discrete Mathematics) as outlined in the *NCTM NCATE Mathematics Content for Secondary.*	MWC	
Comment: *Section III of the report indicates that Assessments #1 the OSAT for Mathematics, #2 GPA in Required Math Courses, #3 Lesson Plan, #6 Proof Portfolio, and #7 provide evidence for Standard 1.* *Standard 1a is met by Assessments #1 and #2 To assure proper and complete content assessment the alignment needs to be between the NCTM Mathematical Domains and the OSAT Exam subtests in Assessment #1.* *Standard 1a is not met by Assessments #3 and #7. Assessment #3 is not aligned to the standard. The program does not report an Assessment #7 in either Section II or Section IV.* *Standard 1a is not met by Assessment #6; the assessment does not encompas the range of concepts within the mathematical domains required by the standard.*		
Standard 2: Mathematical Practices Effective teachers of secondary mathematics solve problems, represent mathematical ideas, reason, prove, use mathematical models, attend to precision, identify elements of structure, generalize, engage in mathematical communication, and make connections as essential mathematical practices. They understand that these practices intersect with mathematical content and that understanding relies on the ability to demonstrate these practices within and among mathematical domains and in their teaching.		
Standard 2.1: Use problem solving to develop conceptual understanding, make sense of a wide variety of problems and persevere in solving them, apply and adapt a variety of strategies in solving problems confronted within the field of mathematics and other contexts, and formulate and test conjectures in order to frame generalizations.	NM	
Comment: *Section III the report indicates that Assessment #2 provides evidence for Standard 2a.*		

[2]More than one column may be used for standards decisions if the program report encompasses more than one program.

Standard	Specific Program or Level[2]	Specific Program or Level
Standard 2a is not met by Assessment #2; the data specific to this element is not disaggregated.		
Standard 2.2: Reason abstractly, reflectively, and quantitatively with attention to units, constructing viable arguments and proofs, and critiquing the reasoning of others; represent and model generalizations using mathematics; recognize structure and express regularity in patterns of mathematical reasoning; use multiple representations to model and describe mathematics; and utilize appropriate mathematical vocabulary and symbols to communicate mathematical ideas to others.	NM	
Comment: *Section III the report indicates Assessments #2, #4 Student Teacher Evaluation and #6 provide evidence for this standard.* *Standard 2b is not met by Assessment #2; see Standard 2a.* *Standard 2b has the potential to be met by the revised Assessment #4; data is needed.* *Standard 2b is not met by Assessment #6; there is no summative data for the standard.*		
Standard 2.3: Formulate, represent, analyze, and interpret mathematical models derived from real-world contexts or mathematical problems.	NM	
Comment: *Section III the report indicates Assessment #2 provides evicence for this standard.* *Standard 2c is not met by Assessment #2; see Standard 2a.*		
Standard 2.4: Organize mathematical thinking and use the language of mathematics to express ideas precisely, both orally and in writing to multiple audiences.	NM	
Comment: *Section III the report indicates Assessments #2, #4, and #6 provide evidence for this standard.* *Standard 2d is not met by Assessment #2 (see Standard 2a) or by Assessment #6 (see Standard 2b).* *Standard 2d has the potential to be met by the revised Assessment #4; data is needed.*		
Standard 2.5: Demonstrate the interconnectedness of mathematical ideas and how they build on one another and recognize and apply mathematical connections among mathematical ideas and across various content areas and real-world contexts.	NM	
Comment: *Section III the report indicates Assessments #2 and #4 provide evidence for this standard.* *Standard 2e is not met by Assessment #2; the Methods Course grade is not reflective of the candidates' level of proficiency on this standard.* *Standard 2e has the potenm=tial to be met by revised Assessment #4; data is needed.*		
Standard 2.6: Model how the development of mathematical understanding within and among mathematical domains intersects with the mathematical practices of problem solving, reasoning, communicating, connecting, and representing.	NM	
Comment: *Section III the report indicates that Assessment #2 provides evidence for this standard.* *Standard 2f is not met by Assessment #2; see Standard 2e.*		
Standard 3: Content Pedagogy Effective teachers of secondary mathematics apply knowledge of curriculum standards for mathematics and their relationship to student learning within and across mathematical domains. They incorporate research-based mathematical experiences and include multiple instructional strategies and mathematics specific technological tools in their teaching to develop all students' mathematical		

Standard	Specific Program or Level[2]	Specific Program or Level
understanding and proficiency. They provide students with opportunities to do mathematics – talking about it and connecting it to both theoretical and real-world contexts. They plan, select, implement, interpret, and use formative and summative assessments for monitoring student learning, measuring student mathematical understanding, and informing practice.		
Standard 3.1: Apply knowledge of curriculum standards for secondary mathematics and their relationship to student learning within and across mathematical domains.	MWC	
Comment: *Section III the report indicaates that Assessments #3, #4 and #5, Teacher Work Sample provide evidenbce for Standard 3.* *Standard 3a is not met by Assessment #3; the description of the assignment leaves the number used for evaluation uncertain, the results of each evaluation are not included and the determination of the mean scores is not described.* *Standard 3a has the potential to be met by revised Assessment #4; data is needed* *Standard 3a is not met by Assessment #5; the quality of the candidates' performance is not included in the criteria which determine the level of proficiency in the scoring guide.*		
Standard 3.2: Analyze and consider research in planning for and leading students in rich mathematical learning experiences.	NM	
Comment: *Section III the report indicates that Assessments #3, #4, and #5 provide evidencew for Standard 3.* *Standard 3b is not met by Assessments #3 and #5; see Standard 3a.*		
Standard 3.3: Plan lessons and units that incorporate a variety of strategies, differentiated instruction for diverse populations, and mathematics-specific and instructional technologies in building all students' conceptual understanding and procedural proficiency.	NM	
Comment: *Section III the report indicates that Assessments #3, #4, and #5 provide evidence for Standard 3.* *Standard 3c is not met by Assessment #3; see Standard 3a.* *Standard 3c is not met by Assessment #5; the data table presents more than one result for the standard.*		
Standard 3.4: Provide students with opportunities to communicate about mathematics and make connections among mathematics, other content areas, everyday life, and the workplace.	M	
Comment: *Section III the report indicates that Assessments #3, #4, and #5 provide evidence for Standard 3.* *Standard 3d is not met by Assessment #3; see Standard 3a.* *Standard 3d is met by Assessment #5.*		
Standard 3.5: Implement techniques related to student engagement and communication including selecting high quality tasks, guiding mathematical discussions, identifying key mathematical ideas, identifying and addressing student misconceptions, and employing a range of questioning strategies.	NM	
Comment: *Section III the report indicates that Assessments #3, #4, and #5 provide evidence for Standard 3.* *Standard 3e is not met by Assessments #3, #4, and #5; see Standard 3c.*		
Standard 3.6: Plan, select, implement, interpret, and use formative and summative assessments to inform instruction by reflecting on mathematical proficiencies essential for all students.	MWC	
Comment: *Section III the report indicates that Assessments #3 and #5 provide evidence for Standard 3.* *Standard 3f is not met by Assessments #3, and #5; see Standard 3c.* *Standard 3f has the potential to be met by Assessment #4; Data is needed.*		
Standard 3.7: Monitor students' progress, make instructional decisions, and measure students' mathematical understanding and ability using formative and summative assessments.	NM	

Standard	Specific Program or Level[2]	Specific Program or Level
Comment: *Section III the report indicates that Assessments #3, #4, and #5 provide evidence for Standard 3.* *Standard 3g is not met by Assessments #3, #4, and #5; see Standard 3c.*		
Standard 4: **Mathematical Learning Environment** Effective teachers of secondary mathematics exhibit knowledge of adolescent learning, development, and behavior. They use this knowledge to plan and create sequential learning opportunities grounded in mathematics education research where students are actively engaged in the mathematics they are learning and building from prior knowledge and skills. They demonstrate a positive disposition toward mathematical practices and learning, include culturally relevant perspectives in teaching, and demonstrate equitable and ethical treatment of and high expectations for all students. They use instructional tools such as manipulatives, digital tools, and virtual resources to enhance learning while recognizing the possible limitations of such tools.		
Standard 4.1: Exhibit knowledge of adolescent learning, development, and behavior and demonstrate a positive disposition toward mathematical processes and learning.	MWC	
Comment: *Section III the report indicates that Assessments #3, #4, and #5 provide evidence for Standard 4.* *New Assessment #4 has the potential to meet Standard 4a.*		
Standard 4.2: Plan and create developmentally appropriate, sequential, and challenging learning opportunities grounded in mathematics education research in which students are actively engaged in building new knowledge from prior knowledge and experiences.	MWC	
Comment: *Section III the report indicates that Assessments #3, #4, and #5 provide evidence for Standard 4.* *Assessment 3 has the potential to meet Standard 4b.* *New Assessment #4 has the potential to meet Standard 4b.*		
Standard 4.3: Incorporate knowledge of individual differences and the cultural and language diversity that exists within classrooms and include culturally relevant perspectives as a means to motivate and engage students.	MWC	
Comment: *Section III the report indicates that Assessments #3, #4, and #5 provide evidence for Standard 4.* *Assessment 3 has the potential to meet Standard 4c.* *New Assessment #4 has the potential to meet Standard 4c.* *Assessment 5 has the potential to meet Standard 4c.*		
Standard 4.5: Demonstrate equitable and ethical treatment of and high expectations for all students.	MWC	
Comment: *Section III the report indicates that Assessments #3, #4, and #5 provide evidence for Standard 4.* *Assessment 3 has the potential to meet Standard 4d.* *New Assessment #4 has the potential to meet Standard 4d.*		
Standard 4.6: Apply mathematical content and pedagogical knowledge to select and use instructional tools such as manipulatives and physical models, drawings, virtual environments, spreadsheets, presentation tools, and mathematics-specific technologies (e.g., graphing tools, interactive geometry software, computer algebra systems, and statistical packages); and make sound decisions about when such tools enhance teaching and learning, recognizing both the insights to be gained and possible limitations of such tools.	MWC	
Comment: *Section III the report indicates that Assessments #3, #4, and #5 provide evidence for Standard 4.* *Assessment 3 has the potential to meet Standard 4e.* *New Assessment #4 has the potential to meet Standard 4e.* *Assessment 5 has the potential to meet Standard 4e.*		
Standard 5: **Impact of Student Learning**		

Standard	Specific Program or Level[2]	Specific Program or Level
Effective teachers of secondary mathematics provide evidence demonstrating that as a result of their instruction, secondary students' conceptual understanding, procedural fluency, strategic competence, adaptive reasoning, and application of major mathematics concepts in varied contexts have increased. These teachers support the continual development of a productive disposition toward mathematics. They show that new student mathematical knowledge has been created as a consequence of their ability to engage students in mathematical experiences that are developmentally appropriate, require active engagement, and include mathematics-specific technology in building new knowledge.		
Standard 5.1: Verify that secondary students demonstrate conceptual understanding; procedural fluency; the ability to formulate, represent, and solve problems; logical reasoning and continuous reflection on that reasoning; productive disposition toward mathematics; and the application of mathematics in a variety of contexts within major mathematical domains.	MWC	
Comment: *Section III the report indicates that Assessments #4 and #5 provide evidence for Standard 5.* *New Assessment #4 has the potential to meet Standard 5a..* *Assessment 5 has the potential to meet Standard 5a.*		
Standard 5.2: Engage students in developmentally appropriate mathematical activities and investigations that require active engagement and include mathematics-specific technology in building new knowledge.	MWC	
Comment: *Section III the report indicates that Assessments #4 and #5 provide evidence for Standard 5.* *New Assessment #4 has the potential to meet Standard 5a..*		
Standard 5.3: Collect, organize, analyze, and reflect on diagnostic, formative, and summative assessment evidence and determine the extent to which students' mathematical proficiencies have increased as a result of their instruction.	MWC	
Comment: *Section III the report indicates that Assessments #4 and #5 provide evidence for Standard 5.* *New Assessment #4 has the potential to meet Standard 5a.* *Assessment 5 has the potential to meet Standard 5a.*		
Standard 6: **Professional Knowledge and Skills** Effective teachers of secondary mathematics are lifelong learners and recognize that learning is often collaborative. They participate in professional development experiences specific to mathematics and mathematics education, draw upon mathematics education research to inform practice, continuously reflect on their practice, and utilize resources from professional mathematics organizations.		
Standard 6.1: Take an active role in their professional growth by participating in professional development experiences that directly relate to the learning and teaching of mathematics.	MWC	
Comment: *Section III the report indicates that Assessments #4 and #5 provide evidence for Standard 6.* *New Assessment #4 has the potential to meet Standard 6a.* *Assessment 5 has the potential to meet Standard 6a.*		
Standard 6.2: Engage in continuous and collaborative learning that draws upon research in mathematics education to inform practice; enhance learning opportunities for all students' mathematical knowledge development; involve colleagues, other school professionals, families, and various stakeholders; and advance their development as a reflective practitioner.	MWC	
Comment: *Section III the report indicates that Assessments #4 and #5 provide evidence for Standard 6.* *New Assessment #4 has the potential to meet Standard 6b.* *Assessment 5 has the potential to meet Standard 6b.*		
Standard 6.3: Utilize resources from professional mathematics education organizations such as print, digital, and virtual resources/collections.	MWC	
Comment: *Section III the report indicates that Assessments #4 and #5 provide evidence for Standard 6.* *New Assessment #4 has the potential to meet Standard 6c.*		

Standard	Specific Program or Level[2]	Specific Program or Level
Standard 7: **Secondary Mathematics Field Experiences and Clinical Practice** Effective teachers of secondary mathematics engage in a planned sequence of field experiences and clinical practice under the supervision of experienced and highly qualified mathematics teachers. They develop a broad experiential base of knowledge, skills, effective approaches to mathematics teaching and learning, and professional behaviors across both middle and high school settings that involve a diverse range and varied groupings of students. Candidates experience a full-time student teaching/internship in secondary mathematics directed by university or college faculty with secondary mathematics teaching experience or equivalent knowledge base.		
Standard 7.1: Engage in a sequence of planned field experiences and clinical practice prior to a full-time student teaching/internship experience that include observing and participating in both middle and high school mathematics classrooms and working with a diverse range of students individually, in small groups, and in large class settings under the supervision of experienced and highly qualified mathematics teachers in varied settings that reflect cultural, ethnic, linguistic, gender, and learning differences.	MWC	
Comment: *Standard 7.a has the potential to be met with Section I part 2 -- Field Experience Description.* *The description provided is general and should address the mathematics educaiton program specifically.*		
Standard 7.2: Experience full-time student teaching/internship in secondary mathematics that is supervised by a highly qualified mathematics teacher and a university or college supervisor with secondary mathematics teaching experience or equivalent knowledge base.	MWC	
Comment: *Standard 7.b has the potential to be met with Section I part 2 -- Field Experience Description.* *The description provided is general and should address the mathematics educaiton program specifically.*		
Standard 7.3: Develop knowledge, skills, and professional behaviors across both middle and high school settings; examine the nature of mathematics, how mathematics should be taught, and how students learn mathematics; and observe and analyze a range of approaches to mathematics teaching and learning, focusing on tasks, discourse, environment, and assessment.	MWC	
Comment: *In Section III the program indicaates that Assessment #4 Student Teaching Evaluation provide evidence for Standard 7.c.* *The revised Student Teaching Evaluatoin has the potential to meet 7.c.*		

PART C—EVALUATION OF PROGRAM REPORT EVIDENCE

C.1—Candidates' knowledge of content. Performance-based standards addressed in this entry could include (but are not limited to) Standards 1-3. Information from Assessments #1 and #2 should provide primary evidence in this area. (Assessments #6-#8 may also focus on content knowledge.)

C.2—Candidates' ability to understand and apply pedagogical and professional content knowledge, skills, and dispositions. Information from Assessments #3 and #4 should provide primary evidence in this area. (Assessments #6-#8 may also focus on pedagogical knowledge, skills, and dispositions.)

C.3—Candidate effects on P-12 student learning. Information from Assessment #5 should provide primary evidence in this area. (Assessments #6-#8 may also focus on student learning.)

PART D—EVALUATION OF THE USE OF ASSESSMENT RESULTS

D—Evidence that assessment results are evaluated and applied to the improvement of candidate performance and strengthening of the program (as discussed in Section V of the program report.)

PART E—AREAS FOR IMPROVEMENT

PART F—ADDITIONAL COMMENTS

F.1—Comments on context and other topics not covered in sections B-D:

F.2—Concerns for possible follow up by the Board of Examiners:

PART G: TERMS AND SUBSEQUENT ACTIONS FOR DECISIONS

☐ **Program is recognized.** The program is recognized through the semester and year of the institution's next accreditation visit in 5-7years. To retain recognition, another program report must be submitted before that review. The program will be listed as recognized through the semester of the next review on websites and/or other publications of the OEQA. The institution may designate its program as recognized by OEQA, through the semester of the next accreditation review, in its published materials.
Subsequent action by the institution: None. Recognized programs may not file revised reports addressing any unmet standards or areas for improvement.

☒ **Program is recognized with conditions.** The program is recognized through Spring 2020. The program will be listed as recognized on websites and/or other publications of the OEQA. The institution may

designate its program as recognized by OEQA, through the time period specified above, in its published materials.

Subsequent action by the institution: To retain accreditation, a report addressing the conditions to recognition must be submitted within 18 months of the date of this report, no later than Fall 2019. **The program has up to two opportunities within the 18 months to address conditions.** The report must address the conditions specified in the box below. Failure to submit a report by the date specified above will result in loss of recognition.

☐ **Program is recognized with probation.** This determination is appropriate only for programs which have been previously recognized. The program is recognized through [date to be filled in by OEQA]. The program will be listed as recognized on websites and/or other publications of the OEQA. The institution may designate its program as recognized by OEQA, through the time period specified above, in its published materials.

Subsequent action by the institution: To retain accreditation, a report addressing the concerns identified in the recognition report must be submitted within 12 months of the date of this report, no later than [date to be filled in by OEQA]. The unit has the option of submitting a new report for recognition within the same time frame. Failure to submit a report by the date specified above will result in loss of recognition.

☐ **Further development required.** This determination is appropriate only for programs which have not been previously recognized and indicates the program does not yet satisfy requirements for recognition.

Subsequent action by the institution: A report addressing the concerns identified in the recognition report must be submitted within 12 months of the date of this report, no later than [date to be filled in by OEQA]. The unit has the option of submitting a new report for recognition within the same time frame. Failure to submit a report by the date specified above will result in program status changed to Not Recognized.

☐ **Program is not recognized.** Programs that retain recognition from a prior review will lose recognition at the end of the semester in which the accreditation visit is held, unless a revised program report is submitted in or before that semester.

Subsequent action by the institution: A revised report, addressing unmet competencies, may be submitted within 18 months of the date of this report, no later than [date to be filled in by OEQA]. The institution may submit a new program report at any time. Another program report must be submitted before the next accreditation visit.

For further information on due dates or requirements, contact Angie Bookout or Renee Launey-Rodolf at the OEQA (405-522-5399).

☒ **Recognition with conditions:** The following conditions must be addressed within 18 months (see above for specific date):

1. Assessment #1 should show the alignment between the subareas on the OSAT for which data is available and the NCTM Mathematical Domains. There is no need to include discussion of the rubric since this assessment is scored by Pearson and is confidential.

2. Assessment #2 should list the Standard.elements aligned to each required math course in the final GPA data table. Only Standards 1 and 2 should be included in this assessment.

3. Assessment #3 should indicate the number of Lesson Plans evaluated for each candidate. The assessment should include a data table with the frequency at each score-level for each aligned entry of the scoring guide; a description is needed for the process of obtaining the

mean results in the final data table. The criterion for each level in the rubric, Unacceptable to Exceeds Expectations should inlcude NCTM element level language. The criteria are defined in generic eduation terms and aligned with the NCTM standards but should be more specifically developed to represent the NCTM standards and elements.

4. Assessment #4 should include a data table with the frequency at each score level for each aligned entry of the scoring guide; a description is needed for the process of obtaining the mean results in the final data table.

5. Assessment #5 should include a data table with the frequency at each score level for each aligned entry of the scoring guide; a description is needed for the process of obtaining the mean results in the final data table.

6. Assessment #6 should indicate the number of proofs evaluated for each candidate. The assessment should include a data table with the frequency at each score-level for each aligned entry of the scoring guide; a description is needed for the process of obtaining the mean results in the final data table.

7. The table in Section I of the report which list the years and number of candidates needs to reflect the years and number of candidates reported in the data tables in Section IV of the report.

8. Section I Part 2 should provide a description of the field experiences that are specific to matheamtics education in order to meet Standards 7a and 7b.

For examples of rubrics and data tables see http://caepnet.org/accreditation/caep-accreditation/spa-standards-and-report-forms/nctm.

For new programs, the completion of Section 5 is an automatic condition.

Mathematics B.S., Program Review, Section 14

Professional Development of Faculty Documentation

DEPARTMENTAL DOCUMENTATION OF PROFESSIONAL DEVELOPMENT

Name	Professional Training Attended	Location	Date
Carol Fowlkes	NCTM annual meeting	San Francisco, CA	4/13-4/16
Carol Fowlkes	OACTE/OCTP/OATE Program Review Training	University Central Oklahoma	23 Oct-15
Carol Fowlkes	CAEP Program Reviewer Training sessions	webinar	14 Sep-15

DEPARTMENTAL DOCUMENTATION OF PROFESSIONAL DEVELOPMENT

Name	Professional Training Attended	Location	Date
Carol Fowlkes	OACTE/OCTP/OATE Program Review Training	Postal Center Norman OK.	oct 28 2016
Carol Fowlkes	CAEP Program Reviewer Training sessions	webinar	May 15 2017

DEPARTMENTAL DOCUMENTATION OF PROFESSIONAL DEVELOPMENT

Name	Professional Training Attended	Location	Date
Carol Fowlkes	OACTE/OCTP/OATE Program Review Training	Southern Nazarene University	9 Feb-18
Carol Fowlkes	CAEP Program Reviewer Training sessions	webinar	May 2 2018
Harold Kihega	National Science Foundation/Keller collaboration	Washington D.C.	9 Nov-17
Harold Kihega	National Science Foundation/Keller collaboration	Washington D.C.	11 Apr-18

DOCUMENTATION OF PRESENTATIONS OR SEMINARS GIVEN

Name	Presentations/Seminars Given	Location	Date
Harold Kihega	Biology program presentation	Round table breakfast, North Campus	10 Jan-18
Harold Kihega	Biology program presentation	Round table breakfast, South Campus	17 Jan-18
Harold Kihega	Biology program presentation	Board of trustees, South Campus	2/19/18

Mathematics B.S., Program Review, Section 15

Strategic Plans and Budgets Related to Program (WIG Notebook)

2015-16

Evaluation of SPU Progress
(Using Goals as the Measure)

Objective No.	Goals	Resources Used	Summary of Evaluation Results	How were results used to make improvements?	Percentage Achieved
1	1.1 Develop physics engineering with robotics emphasis major	Rose State Fablab contacts	1.1.1 Develop program outcomes was accomplished	The School of Math and Science has determined that to attract more students to MACU and to science we need to offer a biology program instead of a robotics emphasis.	50%
		FIRST (For Inspiration and Recognition of Science and Technology)	1.1.2 Develop student outcomes - did not progress this far		
			1.1.3 Write course descriptions for new courses to be added - did not progress this far		
			1.1.4 Take proposal to approve (develop) program to faculty meeting after collecting necessary signatures. This was accomplished and was approved by the faculty, however, it was not approved by the University Senate		
			1.1.5 Begin advertising new major. We did not progress this far		
			1.1.6 Attend high school robotics competitions to recruit students. Dr. Fowlkes did attend FLL competitions and was a judge to meet new contact. Dr. Fowlkes also was a First Robotics Competition judge at Newcastle to meet new contacts.		
1	1.2 Develop Secondary Science in Physics major		1.2.1 Get approval from Dr. Lease to present proposal to develop again. This was not discussed because of the robotics proposal as well as the deletion of the Physics program	The School of Math and Science can now focus on science education utilizing the biology track which will attract more students.	0%
			1.2.2 present proposal to develop secondary science major to University senate (already have approval to develop from faculty). This was not accomplished - see action step 1.2.1		
			1.2.3 Develop proposed plan for secondary science to present faculty for approval pending CAEP approval. Not accomplished		
			1.2.4 Write program review using CAEP standards for science alignment. Not accomplished.		
2	2.1 Establish partnership with OCCC math/science department		2.1.1 meet with advisors. We did not accomplish this action step.	The School of Math and Science will continue with this goal of establishing partnerships, specifically with the Chemistry department	0%
			2.1.2 Volunteer to be a guest lecturer. We did write a state grant to partner with OCCC and establish office hours and contacts but this grant was not approved.		
			2.1.3 Establish office hours at OCCC		
2	2.2 Establish partnership with Rose State math/science department		2.1.1 meet with advisors. We did meet with the directors of the FabLab and professors in this area.		33%

			2.1.2 Volunteer to be a guest lecturer. We did write a state grant to partner with Rose State and establish office hours and contacts but this grant was not approved.		
			2.1.3 Establish office hours at Rose State		

GL Description	GL	Sub	2012-2013 Actuals	2013-14 Actuals	2014-15 1st Qtr Actuals	2014-15 Budget	2015-16 Approved Budget
445 - School of Mathematics & Science							
Salaries - General	80200		7,528.53	86,053.45	27,925.90	113,096.38	115,358.31
Salaries - Adjunct	80210		-	17,079.66	-	18,257.22	17,545.00
Employer Tax Expense	80400		575.91	7,063.01	1,845.77	7,425.57	7,395.69
Retirement	80410		-	2,309.53	773.29	3,131.72	3,131.78
Insurance - Group	80420		-	12,952.99	4,309.56	16,713.84	19,567.73
Unemployment Taxes	80430		-	361.82	17.55	361.80	361.80
Moving Expense	80530		-	5,000.00	-	-	
Professional Dues	80650		-	-	-	-	1,000.00
Instructional Supplies	80700		943.73	2,124.08	-	750.00	750.00
Copier Supplies	80710		-	-	-	180.00	180.00
Commercial Printing	80730		-	65.00	-	-	
Postage	80740		-	26.00	-	-	
Furniture & Equipment	81710		-	408.00	-	-	
		Total:	**$ 9,048.17**	**$ 133,443.54**	**$ 34,872.07**	**$ 159,916.53**	**$ 165,290.31**

Capital Expenditures

Dept #	Department Name		Description	Total
445	Math and science	Furn & Fix	Physics lab	$ 9,000.00

16-17

Evaluation of SPU Progress
(Using Goal as the Measure)

Objective No.	Department/School Goals	Resources Used	Summary of Evaluation Results	How were results used to make improvements?	Percentage Achieved
1	1.1 Develop Biology major		Faculty/senate approved proposal to approve biology major	Starting with 29 biology majors in fall of 2017	100%
	1.1.1 Develop program outcomes		developed program outcomes but will continue assessment process as courses are added		100%
	1.1.2 Develop student outcomes		two courses developed: Biology I for majors with lab and Anatomy and Physiology I with lab and student learning outcomes being developed for assessment.		5%
	1.1.3 Write course descriptions for new courses to be added		All course descriptions for 70 biology and supporting course hours were written and approved and in catalog.		100%
	1.1.4 Take proposal to approve program to faculty meeting after collecting necessary signatures		Faculty/senate approved proposal to approve biology major		100%
	1.1.5 Begin advertising new major		Asked admissions to send out notification to high schools about new biology major. Not sure if this was accomplished		50%
	1.1.6 Explore funding options for Chemistry/Microbiology Lab		We have established partnership with Otoe-Missouria tribe for $20,000 lab equipment. We are still exploring options with the OM tribe for future funding for labs and lab rooms. Working with Dr. McDowell to explore options for new laboratories to be built. Met with Chemistry chair at OCCC to arrange lab use there.		100%
1	1.2 Develop Secondary Science in Biology major		This has not been developed yet	not used	0%
	1.2.1 Write program review		this has not been done		0%
2	2.1 Establish partnership with Otoe-Missouria tribe		This was accomplished	We have secured $20,000 which allowed us to start a semester early by offering Biology 1 and A&P I in the spring. We were able to supply two labs with this money.	100%

	2.1.1 Develop Spring Break/summer STEM camp for OM students		This was developed and was set for May but was postponed by the OM tribe until future date		100%
	2.1.2 Offer scholarships for OM student mentors		This was not accomplished		0%
	2.1.3				
	3.1				
	3.1.1				
	3.1.2				
	3.1.3				

445 - School of Mathematics & Science

department code	GL Description	GL	2013-14 Actuals	2014-15 Actuals	2015-2016 1st & 2nd Qtr Actuals	2015-2016 Budget	2016-2017 Proposed Budget
445	Professional Dues	80650	-	-	-	1,000.00	-
445	Instructional Supplies	80700	2,124.08	1,043.58	1,498.07	750.00	2,000.00
445	Copier Supplies	80710	-	-	-	180.00	100.00
445	Commercial Printing	80730	65.00	-	-	-	
445	Postage	80740	26.00	-	-	-	
445	Furniture & Equipment	81710	408.00	-	-	-	
		Total:	**$ 2,623.08**	**$ 1,043.58**	**$ 1,498.07**	**$ 1,930.00**	**$ 2,100.00**

17-16

Evaluation of SPU Progress
(Using Goal as the Measure)

Objective No.	Department/School Goals	Resources Used	Summary of Evaluation Results	How were results used to make Improvements?	Percentage Achieved
1	1.1 Hire full-time Chemistry/biology professor (Priority A)	Dr. Shore at OCCC	A full-time chemistry professor was hired, Dr. Deshani Fernando, on 5/15/2018	We will now develop Chemistry 2, and organic chemistry 1 and 2.	100%
1	1.2 Hire full-time lab instructor (Priority A)		We used student workers as lab assistants for athletes that missed lab		0%
2	2.1 After hiring lab assistant provide resources to develop a safety protocol for MACU (Priority A)		By hiring Dr. Fernando we will be able to develop a lab safety protocol for MACU		50%
3	3.1 Get multiple estimates on cost of building and supplies for Chemistry/Microbiology lab (Priority A)		We ordered supplies for Chemistry 1 and secured articulation with OSSM for Chemistry labs		50%
4	4.1 Provide stipends for student workers in STEM camp (Priority B)		STEM camp was cancelled due to lack of interest from Frontier students.		0%
5	5.1 Write program review for Secondary Science with Biology emphasis				0%

Mid-America Christian University
2017-2018 Proposed Budget

		Projected Expenses for 2017							Projected Expenses for 2018						
		June	July	August	September	October	November	December	January	February	March	April	May	YR TOTAL	
	Monthly Expense Totals >	$ -	$ 8,600	$ 4,270	$ 3,070	$ 2,820	$ 2,770	$ 9,370	$ 2,050	$ 2,350	$ 2,100	$ 2,050	$ 2,050	$ 41,500	
	% of Total Departmental Budget >	0.0%	20.7%	10.3%	7.4%	6.8%	6.7%	22.6%	4.9%	5.7%	5.1%	4.9%	4.9%		
Dept.	445														
Account Code	Account Name and Detail Description														
80210	Salaries - Adjunct	$ -	$ -	$ 2,760	$ 2,760	$ 2,760	$ 2,760	$ 2,760	$ 2,040	$ 2,040	$ 2,040	$ 2,040	$ 2,040	$ 24,000	57.8%
80210	2 general education science classes 4 hrs			$ 2,400	$ 2,400	$ 2,400	$ 2,400	$ 2,400	$ 1,680	$ 1,680	$ 1,680	$ 1,680	1,680		
80210	4 math courses 3 hr														
80210	$1800*4+$2400*2 for fall														
80210	$1800*2+$2400*2 for spring														
80210	Federal Work Study (15 hrs/week for 32 weeks)			$ 360	$ 360	$ 360	$ 360	$ 360	$ 360	$ 360	$ 360	$ 360	360		
80210	Salaries - Adjunct	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0.0%
80210															
80210															
80210															
80210															
80210															
80530	Moving Expense	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0.0%
80530															
80530															
80530															
80530															
80530															
80650	Professional Dues	$ -	$ -	$ 1,500	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,500	3.6%
80650	National Assn of Biology Teachers			$ 1,500											
80650															
80650															
80650															
80650															
80700	Instructional Supplies	$ -	$ 8,600	$ -	$ -	$ -	$ -	$ 6,600	$ -	$ -	$ -	$ -	$ -	$ 15,200	36.6%
80700	General biology labs		$ 1,000					$ 1,000							
80700	Biology I, II labs		$ 2,200					$ 2,200							
80700	Anatomy & Physiology I, II labs		$ 2,200					$ 2,200							
80700	Zoology, Botany labs		$ 3,200					$ 1,200							
80700															
80710	Copier Supplies	$ -	$ -	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 100	0.2%
80710				$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	$ 10	10		
80710															
80710															
80710															
80710															
80720	Office Supplies	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0.0%
80720															
80720															
80720															
80720															
80720															
80730	Commercial Printing	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0.0%
80730															
80730															
80730															
80730															
80730															
80740	Postage	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0.0%
80740															
80740															
80740															
80740															
80740															
-	STEM club and summer camp	$ -	$ -	$ -	$ 300	$ 50	$ -	$ -	$ -	$ 300	$ 50	$ -	$ -	$ 700	1.7%
81030	speakers at STEM club				$ 300					$ 300					
-															
80520	school van for STEM club trips					$ 50					$ 50				
-															
-		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0.0%
-															
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-															
-		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0.0%
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-															
-		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0.0%
-															
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-															
-															
-		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0.0%

Mathematics B.S., Program Review, Section 16

Other Pertinent/Substantive Evidence (i.e. Student Scores on non-MACU Standardized Tests (State/National/Professional); Feedback from Professional Entities that are non-MACU affiliated

Mathematics B.S., Program Review, Section 17

Program Review Evaluation

Program Review Evaluation

School of Math and Science

Mathematics Department

S.W.O.T. Analysis

Strengths:

- **High Retention Rates.** In the 2017-18 Academic Year, the School of Math and Science had one of the top 5 retention rates for MACU at 66.67%. This does include Biology majors, as well. If students are leaving, it is because of financial reasons as stated by students. We also have lost a few that wanted engineering degrees but came to MACU to get their basics for the first few years and play sports.
- **High Graduation Rates**. We have graduated 12 over the past 3 years.
- **Graduates with good jobs and success**. Of the 12 graduates, 5 are teaching in the public school systems in Oklahoma and Texas. One has graduated with his master's and worked as a graduate assistant at Northwestern University. 3 are working in the business world, one of those in a government job as an engineer, and one of those started his own business in Brazil. 2 are continuing their education to become a nurse and architect. One is pursuing his master's degree and working on getting accepted into a master's program. 1 of the graduates was MACU's valedictorian in the graduating class of 2016. Also in the graduating classes of 2016 and 2017, the Salutatorians came from the math program.
- **Stability in the professors**: The chair of the math department has been a professor of math for 20 years at MACU. The adjunct professors have been stable at MACU as well. They are easily accessible by the students because they are employees of MACU as golf coach and business office.
- **High ratings on End of Course Evaluations**: The professors receive high ratings from the students on the End of Course (EOC) evaluations which shows that students are satisfied with their professors and their knowledge.
- **Technology**: The technology that the math program utilizes will compare with any large university. The program utilizes room 119 which has desktop computers for all students that have Geometer's Sketchpad (Dynamic geometry software), Calculus in Motion, Excel, and other programs useful for math majors. The students are also required to utilize the latest in graphing calculator technology which the professor's utilize as a tool to assist learning.

Weaknesses:

- **Low Enrollment Program**. Math is a program that is so needed but is a difficult subject area. It is a low enrollment program for most colleges. The numbers at MACU have stayed consistent ranging from 15 to 25, however. My numbers will always include math majors, Math multidisciplinary majors, and math education majors.

Opportunities:

- **Additional majors**. The School of Math and Science has been in discussion with the Recruitment office to discover the most requested majors. One of the top majors that is requested is Engineering. We are considering adding a Pre-Engineering major which will utilize math and physics courses. We are also researching the feasibility of adding a Data Analytics major. This major would require math, statistics and computer science courses so we could add it as a multidisciplinary option.

Threats:

- **Tuition Costs**. The tuition rates are high when compared to state schools. We must keep quality high for those students that want a private university with a God-centered focus. We must keep the "family" feel at MACU which is what separates MACU from other larger state schools.
- **Math Education**. We are losing our students that come to MACU pursuing a secondary math degree because they find out they can be a math major and still teach by utilizing the Alternative Certification program for math. While the students are continuing their education at MACU, Oklahoma is losing so many of its good teachers because of its lack of pay and sometimes impossible requirements.

Closing Summation

In closing, the last three years for the mathematics department at MACU has been beneficial to MACU. We have seen the start of a biology program for which the math department teaches many required courses for those students preparing to go into the medical fields. The math program has also prepared students to start businesses, be successful problem solvers in their chosen vocation, and teach middle school and high school students in a state that is begging for good, quality teachers.

The math program fulfills the mission of the university by allowing students to create, collaborate, and innovate to solve local and global problems. The strategic planning shows that the program has a vision for the future to continue to be relevant in an ever-changing society. The Wildly Important Goals (WIGs) of the math program show that the professors care about each student and listen to their students wants and needs to accommodate those students while still challenging them in a very rigorous discipline.

The future is bright as the math program continues to look for concentrations or new majors that will fulfill the mission of MACU and attract more students. The math program truly is making a difference in the lives of the students it serves.

Quotes from recent graduates

2016 graduate who is teaching: "Going through MACU's math program made me a more confident person and helped me become the patient teacher I am today."

2017 graduate who is an RN (Salutatorian at MACU): "The math program at MACU challenged me. The classes helped shape my ability to think logically and to build persistence in figuring out the problem in areas I struggled in. The faculty were there every step of the way to help me with whatever I may have needed to succeed."

2018 graduate who is getting his certification in architecture: "I don't know where to start. If it wasn't for MACU's math program I wouldn't be where I am right now. Thanks to this program I was able to go through college and get my bachelor's degree. The math program really helps you improve in every field of math and the teachers are amazing. They help you with everything until you understand it 100%.

2016 graduate who completed Master's as graduate assistant: "Provided me opportunities to grow and learn more about math and myself as a person and has provided me ample career opportunities time and time again after graduating! The faculty and staff created a culture that I could thrive in by displaying confidence and Christ-like traits and I appreciate that the most about MACU's math program."

2016 graduate who is teaching: "Our math department was amazing. Being in a small and tight knit group was better than I could have hoped for. It taught me a lot about working with others and that different people learn in different ways. That, along with the professors, inspired me to step out and try teaching. I'm in my 2nd year of teaching and I can honestly say I never would have done it without the math department and its professors. I enjoy the challenges and I often think back on our classes to find ideas on how to better myself and my classroom productivity."

2016 graduate who is working in the business world (Valedictorian at MACU): "MACU's math program taught me to use critical thinking when solving problems. The professors helped me to succeed, and now I have a degree in a subject I love."

Program Review Evaluation
Mathematics, fall 2018

The Reviewers agree with the S.W.O.T analysis found on pages 115-117 of this Program Review.

Program Chair: Carol Fowlkes, Ph.D.

Signature _____ date signed 11-2-2018

Director of Institutional Effectiveness, Ray Dillman, M.A.

Signature _____ date signed 11-2-2018

Program Director, General Education (CAGS): Trina Arnold, M.Ed., MBA

Signature _____ date signed 11/2/2018

Chair, General Education (CAS/CAGS): Chet Horn, M.A.

Signature _____ date signed 11/02/18

Program Dean (CAS): Esther Rehbein, M.Ed.

Signature _____ date signed 11-05-18

Vice-President of Academic Affairs, Dr. Sharon Lease

Signature _____ date signed 11.5.18