SEMINOLE STATE COLLEGE
ASSOCIATE IN SCIENCE IN MATHEMATICS (211)

2016-17 Degree Program Evaluation

The information required to complete this annual evaluation process mirrors the information required by OSRHE Policy on Academic Program Review. Specifically, it covers the following Vitality of the Program items: (1) Program Objectives and Goals, (2) Quality Indicators, (3) Minimum Productivity Indicators, and (4) Other Quantitative Measures (for additional information see OSRHE Policy 3.7.5.B.1-4).

1. Program Objectives and Goals

Associate in Science in Mathematics Degree Program Outcomes

Outcomes for Transfer Degree Programs

Outcome 1: Demonstrate successful articulation of Seminole State College transfer degree programs to state and professional institutions of higher learning granting professional and baccalaureate degrees in Oklahoma.

Outcome 2: Demonstrate successful academic achievement by Seminole State College transfer degree students at primary receiving state baccalaureate institutions of higher learning in Oklahoma. Successful academic achievement is defined as the maintenance of satisfactory academic progress toward degree completion as determined by the receiving institution.

Outcomes Specific to Associate in Science in Mathematics

Outcome 3: Demonstrate problem-solving skills foundational to higher order mathematics. Higher order mathematics shall be defined as commonly accepted concepts in algebra, trigonometry, analytic geometry, and calculus.

Outcome 4: Demonstrate preparation for continued pursuit of mathematics education leading to a baccalaureate degree in mathematics.

2. Quality Indicators

**Combined Course Embedded Assessment Results For Fall 2016 and Spring 2017
for Major Field Courses in Degree Program**

General Education Outcomes	Pre-Test % Correct	Post-Test % Correct	Difference
General Education Outcome 1	21%	79%	58%
General Education Outcome 2	21%	79%	58%
General Education Outcome 3	21%	79%	58%
General Education Outcome 4	0%	75%	75%
Specific Outcomes for AS Mathematics	**Pre-Test % Correct**	**Post-Test % Correct**	**Difference**
Degree Program Outcome 3	19%	69%	50%
Degree Program Outcome 4	19%	69%	50%
Degree Program Outcome 5	6%	63%	57%
Degree Program Outcome 6	6%	63%	57%

Other Data Indicating Quality Relevant to Degree Program Major Field
Degree Program Enrollment by Ethnicity

Academic Year	Ethnicity	Summer 2016		Fall 2016		Spring 2017	
2016-17	Total Students	0	100%	5	100%	3	100%
	Black	0	0%	1	20%	0	0%
	Indian	0	0%	0	0%	0	0%
	Asian	0	0%	0	0%	0	0%
	Hispanic	0	0%	1	20%	1	33%
	Hawaiian/Pacific Islander	0	0%	0	0%	0	0%
	White	0	0%	3	60%	2	67%
	Undeclared	0	100%	0	0%	0	0%

Degree Program Enrollment by Gender

Academic Year	Gender	Summer 2016	Fall 2016	Spring 2017
2016-17	Male	0	4	3
	Female	0	1	0

Student Feedback on Instruction:
The average response scores from the Student Feedback on Instruction for the Science, Technology, Engineering, Mathematics Division ranged from 4.20 to 4.73 for the rated scale questions. Therefore, all of the averaged responses fell between "usually applies" and "almost always applies" with those responses describing desired attributes or behaviors. The average S.T.E.M. response score for all the rated scale questions was 4.51.

Graduate Exit Survey:
Overall, students rated their academic experience favorably with 83% of the students rating "quality of teaching in your major field of study" as excellent or above average. More than 79% of students rated "faculty concern for student well-being" and "faculty commitment to student success and learning" as excellent or above average.

Collegiate Assessment of Academic Proficiency (CAAP) Test:
The Science portion of the CAAP test was 0.1 of a point below the national mean.
The Mathematics portion of the CAAP test was 0.1 of a point below the national mean for the current year.

Entering Student Engagement Survey:
Ninety-nine percent of students reported that they believe instructors want them to succeed. Over 70% of students received information about financial aid, enrolled in courses at times convenient to their schedule, and met with an academic advisor at times convenient to the student.

3. Minimum Productivity Indicators

Productivity Indicators

Academic Year	Semester	Declared Majors	Graduates
2016-17	Summer 2016	0	0
	Fall 2016	5	0
	Spring 2017	3	0

Does the degree program meet the minimum OSRHE standards for productivity this year?
Majors Enrolled (25 per year): No
Degree Conferred (5 per year): No

Students seeking a Mathematics Degree will be able to take the same courses using the Mathematics Emphasis in the Liberal Studies Degree Program.

4. Other Quantitative Measures

Number of Sections Taught and Enrollment for Each Course in Major Field of Degree Program

Prefix	Number	Major Field Course Title	Number of Sections	Total Students	Ave. Class Size	Total Credit Hours Generated
CS	1113	Programming in Visual Basic	2	26	13	78
CS	1313	Programming in Java (not offered this period)				
ENGR	1113	Introduction to Engineering	2	23	12	69
MATH	1513	College Algebra	30	494	16	1482
MATH	1613	Plane Trigonometry	2	31	16	93
CS	2013	C++	1	19	19	57
MATH	2153	Elementary Statistics (not offered this period)				
MATH	2215	Calculus and Analytic Geometry I	2	28	14	84
MATH	2424	Calculus and Analytic Geometry II	1	8	8	24
MATH	2434	Calculus and Analytic Geometry III (not offered this period)				
MATH	2533	Differential Equations (not offered this period)				

Credit Hours Generated in Major Field Courses of Degree Program By Level (from table above)

Academic Year	1000 Level Credit Hours Generated	2000 Level Credit Hours Generated
2016-17	1722	165

Note: Credit Hours Generated columns represent the student credit hours generated by all the major field courses of the degree program for the given academic year. The hours do not represent the number of student credit hours generated only by those students declaring this major.

Direct Instructional Costs

Academic Year	Instructional Costs*	Costs Shown By Division or Program?
2016-17	$350,798.00	Mathematics

*When cost data are not available by degree program, use total division budget for instructional costs for each degree program.

Credit Hours Generated by Courses in Major Field of Degree Program That Are Part of General Education Requirements in Other Degree Programs

Major Field Course Information			
Prefix	Number	Title	Credit Hours Generated
MATH	1413	Mathematics in Society	297

MATH	1513	College Algebra	1482
MATH	1613	Plane Trigonometry	93
MATH	2215	Calculus and Analytic Geometry I	84

Faculty Teaching Major Field Courses in Degree Program

Name	Teaching Area	Highest Degree	Institution
Carpenter, Emily	Mathematics	M.S.	Oklahoma State University
Bryant, Melissa	Mathematics	M.Ed.	East Central University
Goeller, Linda	Mathematics	Ph.D.	Oklahoma State University
Gomez, Lynnette	Mathematics	B.S.	Oklahoma Baptist University
Current Full-Time Faculty From Other Divisions Teaching Major Courses in Degree Program **(Instructors with ** beside their name teach only zero-level classes)**			
Cheng, Chun Fu	Information Systems	MBA Management Completion 5/2014	Oklahoma City University
Current Adjunct Faculty Teaching Major Courses in Degree Program **(Instructors with ** beside their name teach only zero-level classes)**			
Coursey, Danita	Mathematics	B.S.	University of Science and Arts of Oklahoma
Helseth, Dave	Science	M.S.	Oklahoma State University
Knox, Vickie	Mathematics	B.S.	East Central University
Love, Mary	Mathematics	M.A.	Northern Arizona University
Qualls, Travis	Mathematics	M.Ed.	East Central University
Schnell, Michael	Computer Science	M.S.	Florida Institute of Technology
Troglin, Annette	Mathematics	M.Ed.	East Central University

5. Recommendations and Other Relevant Items: Describe recommendations, new developments or initiatives pertaining to degree program.

We do hope to expand the program by 5 students per year. In working on student success and completion, students are being encouraged to choose a major. Hopefully, this endeavor will result in more students enrolling in this major. Students seeking a Mathematics Degree will be able to take the same courses using the Mathematics Emphasis in the Liberal Studies Degree Program.