

Program Review Executive Summary

<p>Institution Name: Oklahoma Panhandle State University Program Name and State Regents Code: Mathematics BS 015 List Any Options: Academic, Teaching Date of Review: 10/30/2020 Recommended Date of Next Review: 2025</p>	
<p>Centrality to Institutional Mission: The program of Mathematics follows the Oklahoma Panhandle State University mission of “Rooted in “Progress through Knowledge,” OPSU is committed to promoting excellence in the preparation of students for success in a global community.” This is done through its goals, which align to the primary points of “progress through knowledge... in a global community” with a focus on oral and written communication, analytical and quantitative reasoning, and social responsibility and cultural awareness.</p>	
<p>Program Objectives and Goals: Goal 1: Oral and Written Communication: Communicate effectively using written, oral, and symbolic languages Student Learning Objectives: 1) Students will be able to communicate their mathematical thinking orally to peers, faculty, and others 2) Students will be able to accurately use written representations to demonstrate mathematics Goal 2: Analytical and Quantitative Reasoning: Read and think critically by analyzing, assimilating, and applying information Student Learning Objectives: 1) Students will know, understand, and apply the process of mathematical problem solving 2) Students will be able to reason, construct, and evaluate mathematical arguments and proof and develop an appreciation for mathematical rigor and inquiry 3) Students will recognize, use, and make connections between and among mathematical ideas and in context outside mathematics to build mathematical understanding 4) Students will demonstrate a versatile knowledge of mathematics content 5) Students will embrace technology as an essential tool for teaching and learning mathematics Goal 3: Social Responsibility and Cultural Awareness: Be an aware and active participant in the global, dynamic community Student Learning Objectives: 1) Students will communicate their appreciation for an influential mathematician and his/her place in the historical development of mathematics and how their developments influence the contemporary study of mathematics</p>	
<p>Quality Indicators Such As:</p>	<p>Student benchmarks were not met in all student-learning objectives at the time of the Program Review. These benchmarks and objectives have few students being evaluated in the upper areas. Student evaluations and graduation evaluations were used to inspire the change of focus into just the core area GPA to better analyze student growth. Learning environments for the student are becoming more effective. Faculty in the department participated in a campus wide evaluation of the learning management system; the digital learning space of D2L was reevaluated Summer 2018 and found to still be a great fit for our students and their learning. COVID-19 also spurred greater support in use of learning spaces for digital learning experiences. In Fall 2019, classroom furniture was updated. The capacity of the program to meet needs and expectations of constituencies is met through faculty involvement in professional organizations</p>
<p>Productivity for Most Recent 5 Years</p>	<p>Number of Degrees: 2.25 average over past 4 years Number of Majors: 12.25 average over past 4 years</p>

Other Quantitative Measures Such As:	Number of Courses for Major: 14-25 Student Credit Hours in Major: 44-76 2015/2016 Direct Instructional Costs: \$202045 2016/2017 Direct Instructional Costs: \$188343 2017/2018 Direct Instructional Costs: \$245884 2018/2019 Direct Instructional Costs: \$217136.49 2019/2020 Direct Instructional Costs: \$241995.83 Supporting Credit Hour Production: 1977.5 average over past 4 years																																			
	<table border="1"> <thead> <tr> <th data-bbox="512 423 800 456">Faculty Member</th> <th data-bbox="800 423 1045 456">Credential</th> <th colspan="4" data-bbox="1045 423 2001 456">Institution</th> </tr> </thead> <tbody> <tr> <td data-bbox="512 456 800 488">Mrs. Shawna Tucker</td> <td data-bbox="800 456 1045 488">M.Ed.</td> <td colspan="4" data-bbox="1045 456 2001 488">Southwestern Oklahoma State University</td> </tr> <tr> <td data-bbox="512 488 800 521">Ms. Laura Franks</td> <td data-bbox="800 488 1045 521">M.A.</td> <td colspan="4" data-bbox="1045 488 2001 521">Texas Tech University</td> </tr> <tr> <td data-bbox="512 521 800 553">Miss Alice Brazeau</td> <td data-bbox="800 521 1045 553">M.Ed.</td> <td colspan="4" data-bbox="1045 521 2001 553">Campbellsville University</td> </tr> <tr> <td data-bbox="512 553 800 586">Dr. Yuriy Bulka</td> <td data-bbox="800 553 1045 586">Ph.D.</td> <td colspan="4" data-bbox="1045 553 2001 586">University of Alabama</td> </tr> </tbody> </table>						Faculty Member	Credential	Institution				Mrs. Shawna Tucker	M.Ed.	Southwestern Oklahoma State University				Ms. Laura Franks	M.A.	Texas Tech University				Miss Alice Brazeau	M.Ed.	Campbellsville University				Dr. Yuriy Bulka	Ph.D.	University of Alabama			
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Duplication and Demand	Number of FTE faculty in specialized courses: 2 The Bachelor in Mathematics is a program in demand by local public schools who have a need for competent mathematics teachers. There are other comparable universities offering a similar program outside of the Oklahoma panhandle. However, mathematics is required for general education.																																			
Effective Use of Resources		2015/2016	2016/2017	2017/2018	2018/2019	2019/2020																														
	Cost to operate program per student credit hour	\$259.55	\$267.86	\$264.39	\$296.98	\$312.60																														
	Faculty/ student ratio	1/4.63	1/5	1/3.25	1/1.15	1/1.47																														
Strengths and Weaknesses	Strengths of the program include small teacher to student ratios, and the teaching option being able to have majors eligible for more scholarships. Weaknesses include low number of enrollment, and outdated textbooks.																																			
Recommendations	Maintain at current level																																			