

SOUTH DAKOTA BOARD OF REGENTS ACADEMIC AFFAIRS FORMS

Substantive Program Modification Form

Use this form to request minor changes in existing programs (majors, minors, certificates, or specializations).

UNIVERSITY:	NSU
CURRENT PROGRAM TITLE:	Mathematics Minor
CIP CODE:	27.0101
UNIVERSITY DEPARTMENT:	Science and Mathematics
UNIVERSITY DIVISION:	College of Arts and Sciences

University Approval

To the Board of Regents and the Executive Director: I certify that I have read this proposal, that I believe it to be accurate, and that it has been evaluated and approved as provided by university policy.

Vice President of Academic Affairs or Date President of the University **1.** This modification addresses a change in (*place an "X" in the appropriate box*): Total credits required within the discipline Total credits of supportive course work Total credits of elective course work \times Total credits required for program Program name Existing specialization \square **CIP** Code Other (explain below) 2. Effective date of change: 8/23/2021 **3.** Program Degree Level (*place an "X" in the appropriate box*): Bachelor's \boxtimes Associate \Box Master's □ Doctoral 4. Category (place an "X" in the appropriate box): Certificate Specialization Minor \boxtimes Major 🗌

Program Forms: Substantive Program Modification Form (Last Revised 08/2016)

5. If a name change is proposed, the change will occur (*place an "X" in the appropriate box*):

- \Box On the effective date for all students
- □ On the effective date for students new to the program (enrolled students will graduate from existing program)

Proposed new name:

Reminder: Name changes may require updating related articulation agreements, site approvals, etc.

6. Primary Aspects of the Modification (add lines or adjust cell size as needed):

Existing Curriculum				Proposed Curriculum (<mark>highlight changes</mark>)			
Pref.	Num.	Title	Cr.	Pref.	Num.	Title	Cr.
			Hrs.				Hrs.
MATH	123	Calculus I	4	MATH	123	Calculus I	4
MATH	125	Calculus II	4	MATH	125	Calculus II	4
MATH	351	Foundations of Mathematics	3				
Choose Three: (9-10 credits)				Choose Three to Four: (10 credits)			
*Students may not choose more than two at the 200-level				*Students may not choose more than one at the 200-			
			-			level	
MATH	216	Discrete Structures	3	MATH	216	Discrete Structures	3
MATH	225	Calculus III	4	MATH	225	Calculus III	4
MATH	281	Introduction to Statistics	3				
MATH	321	Differential Equations	3	MATH	321	Differential Equations	3
				MATH	331	Advanced Engineering Math	3
				MATH	351	Foundations of Mathematics	3
MATH	361	Modern Geometry	3	MATH	361	Modern Geometry	3
				MATH	381	Introduction to Probability and	3
						Statistics	
MATH	412	Linear Algebra	3	MATH	412	Linear Algebra	3
MATH	413	Abstract Algebra I	3	MATH	413	Abstract Algebra I	3
MATH	425	Real Analysis I	3	MATH	425	Real Analysis I	3
Total number of hours required for minor 20 Total number of hours required for minor						<mark>18</mark>	

7. Explanation of the Change:

- The number of credits required for the minor is being reduced to 18 to optimize compliance with the BOR's general guidelines for an academic minor.
- The requirement regarding no more than two 200-level courses has been amended to no more than one 200-level course to ensure that students take at least two courses at the 300-level or higher, providing a more well-rounded program of student within the minor.
- To better reflect our current course offerings, MATH 331 has been added and MATH 281 has been replaced with MATH 381.
- MATH 351 prepares students for fundamental theoretical aspects of mathematics, which may not fit well with the needs of a student majoring in a social science, a natural science, the fine arts, business and finance, or engineering. Therefore, this class has been moved to the electives. Additionally, MATH 351 is not a required course in the math minor at any of the other SD regental institutions.