



**SOUTH DAKOTA BOARD OF REGENTS  
ACADEMIC AFFAIRS FORMS**

**Revised Course Request: Common Course  
(Substantive Modifications)**

<u>SDSU</u> <b>Institution</b>	<u>Donna Flint</u> <b>Form Initiator</b>	<u>Suzette Burckhard</u> <b>Dean's Approval Signature</b>	<u>3/1/2023</u> <b>Date</b>
	Jerome J. Lohr College of Engineering / Mathematics & Statistics		
<u>SDSU</u> <b>Institution</b>	<u>Division/Department</u>	<u>Dennis D. Hedge</u> <b>Institutional Approval Signature</b>	<u>4/3/2023</u> <b>Date</b>
	Science & Mathematics	<u>William T. Trentham</u> <b>Institutional Approval Signature</b>	<u>2/27/2023</u> <b>Date</b>
<u>USD</u> <b>Institution</b>	<u>Mathematics</u> <b>Division/Department</b>	<u>Dan Van Peurse</u> <b>Institutional Approval Signature</b>	<u>2/22/2023</u> <b>Date</b>

Indicate universities that currently offer the common course:

☐ BHSU    ☐ DSU    ☒ NSU    ☐ SDSMT    ☒ SDSU    ☒ USD

**Section 1. Existing Course Title and Description**

Prefix & No.	Course Title	Credits
MATH 412	Linear Algebra	3

**Course Description**

A study of vector spaces, linear transformations, matrices, inner products, eigenvalues, eigenvectors, the methods of solution of systems of linear equations, and applications.

**Section 2. Modification(s) Requested**

**2.1. This modification will include:**

	<b><u>Current</u></b>		<b><u>New</u></b>
<input checked="" type="checkbox"/> <b>Prerequisites</b>	Grade of D or better in MATH 125 or MATH 250	to	Grade of D or better in MATH 125 OR Grade of C or better in MATH 250

**Effective term of the change:** Fall 2023

**2.2. Add justification for all changes noted above:**

As taught at SDSU, Linear Algebra requires basic knowledge of Matrix Algebra, which is taught in SDSU MATH 250. Students who have not yet demonstrated a C or better level of understanding and skill do not have a good chance for success in MATH 412 based on both knowledge and level of mathematical maturity. In order to complete the degree in Mathematics at SDSU, a grade of C or better is required in MATH 250. Requiring a C or better as a prerequisite for MATH 412 simply ensures that students take their courses in the correct order. Other universities only require MATH 125 as a prerequisite and this change does not preclude them from continuing this practice.

### **Section 3. Other Course Information**

**3.1. Will this course equate (i.e., be considered the same course for degree completion) with any other unique or common courses in the common course database?** ☐ Yes ☒ No

### **Section 4. Department and Course Codes (Completed by University Academic Affairs)**

	<b><u>Current</u></b>		<b><u>New</u></b>
<input type="checkbox"/> <b>Change in Banner Department</b>	NSU: Science & Mathematics SDSU: Mathematics & Statistics USD: Mathematics	to	No change
<input type="checkbox"/> <b>Change in Banner Department Code</b>	NSCM, SMAS, UMTH	to	No change
<input type="checkbox"/> <b>Change in CIP Code</b>	27.0101	to	No change

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From: Flint, Donna  
Sent: Wednesday, February 22, 2023 4:47 PM  
To: Van Peurse, Dan; Trentham, Stacy M; Trentham, William T  
Cc: Cogswell, Kurt  
Subject: REQUEST- Minor course modification

Hi Dan, Stacy, and William,

We are now approved to teach Math 412 (Linear Algebra), but we are requesting an addition to the prerequisite for the course. Right now, the prerequisite is a grade of D or better in Math 125 or Math 250.

We would like to request to change that to D or better in Math 125 OR C or better in Math 250 (Introduction to Linear Algebra and Proof).

Thanks in advance for your help!

Donna

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#### **NSU Approval:**

From: Trentham, William T  
Sent: Thursday, February 23, 2023 8:29 AM  
To: Van Peurse, Dan; Flint, Donna; Trentham, Stacy M  
Cc: Cogswell, Kurt  
Subject: Re: REQUEST- Minor course modification

Same here. If all you need is verbal approval, then we are good with this modification. If you end up needing the signature of a dept chair, that will be no problem.

-Travis

From: Lapka, Judy Sent: Monday, February 27, 2023 4:08 PM  
To: Flint, Donna; Cogswell, Kurt  
Cc: Hoffelt, Janell; Foubert, Erin H (NSU)  
Subject: Math common course change requests

NSU supports the requested changes.

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#### **USD Approval:**

From: Van Peurse, Dan  
Sent: Wednesday, February 22, 2023 5:15:45 PM  
To: Flint, Donna; Trentham, Stacy M; Trentham, William T  
Cc: Cogswell, Kurt  
Subject: RE: REQUEST- Minor course modification

Hi Donna,

Various forms require various steps of approval and I can never keep them straight. If this is the process where you just need verbal approval from the chair at each affected institution, I give you my approval.

Thanks,  
Dan