MEMORANDUM

DATE: April 6, 2021

TO: NSHE Mathematics Corequisite Task Force

FROM: Crystal Abba, Vice Chancellor for Academic and Student Affairs

CC: NSHE Academic Affairs Council
    NSHE Registrars
    NSHE Articulation Coordinating Committee
    Renee Davis, Assistant Vice Chancellor for Academic and Student Affairs
    Dave Singleton, Academic Officer and Student Ombudsman

RE: Addendum to March 17, 2021 Math 124 and Math 126 Discipline Review Memo

I am issuing this addendum to my March 17, 2021 memorandum due to a number of questions my office has received regarding the implications of that communication in terms of prerequisite requirements outside the specific math pathway within the Business programs of study. While it is understood that Math 124 will allow students to progress directly into Math 176, questions have arisen for other courses in the business programs. For example, at some institutions where Math 126 is the usual prerequisite for Math 176, Math 126 is also a prerequisite for Economics 261. The intention of my prior memo was for Math 124 to meet business program requirements for transfer students into programs where 126 is otherwise required, and this would include courses in the program but outside the specific math pathway. Because Math 124 is being accepted for progression into Math 176, it would be unreasonable—and certainly detrimental to the transfer student—to then require them to take Math 126 to meet other prerequisite requirements within the program.

The original memo is attached.
MEMORANDUM

DATE: March 17, 2021

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FROM: Crystal Abba, Vice Chancellor for Academic and Student Affairs

CC: Academic Affairs Council
Renee Davis, Assistant Vice Chancellor for Academic and Student Affairs
Dave Singleton, Academic Officer and Student Ombudsman

RE: Math 124 and Math 126 Discipline Review

This memo is to serve as an update regarding the outcome of the Mathematics Discipline Committee meeting as it relates to the work of the task force. This process was precipitated by the Board of Regents’ desire for common gateway courses by discipline or academic program. While those common gateway courses exist for the areas of Liberal Arts and for STEM, it became clear that there was a need to review the coursework for the fields of Business and Health Sciences.

A Common Course Numbering (CCN) math discipline meeting was convened on January 14, 2021. As is customary at discipline meetings, each NSHE campus was represented at this meeting by faculty recommended by departments chairs in the discipline.

Based on CCN policy and given a thorough analysis of the content of the two courses, the Discipline Committee determined that MATH 124 and MATH 126 are substantially (80 percent or more) similar in content. However, given the long history of these two courses, which predates the implementation of Common Course Numbering at the system level, the Discipline Committee recommended maintaining both MATH 124 and MATH 126 as distinct courses. This recommendation is supported by the fact that the depth of concepts in discrete areas of study varies markedly between the two courses, as well as the long-standing premise that the two courses serve different student populations.

Given the desire of the discipline review committee to maintain the course numbering of MATH 124 and MATH 126 despite the similar content that under normal circumstances would result in common numbering, the System Office reviewed all existing business and health science programs to determine if maintaining distinct numbers for each course was detrimental to students who transfer. The results of that review and subsequent conversations with the four-year institutions is as follows.
Business
For students transferring to a business program at UNR or UNLV, completing either MATH 124 or MATH 126 will allow the student to move on to their subsequent coursework in the degree of their choosing in the respective College of Business without having to retake a gateway math course. The following table provides the relevant core math requirements for the universities, indicating in all cases that MATH 124 or MATH 126 will be honored allowing the student to continue on the pathway without loss of credit.

<table>
<thead>
<tr>
<th>Degree Program</th>
<th>Core Math Requirement</th>
<th>What happens if student transfers?</th>
<th>Additional Requirement Dependent on Core Math</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting, BSBA</td>
<td>MATH 124</td>
<td>Higher math is acceptable</td>
<td>MATH 127 or higher</td>
</tr>
<tr>
<td></td>
<td>MATH 126</td>
<td>Student who takes 124 waived into 176</td>
<td>MATH 176</td>
</tr>
<tr>
<td>Accounting and Information Sys., BSBA</td>
<td>MATH 126 or higher</td>
<td>Student who takes 124 waived into 176</td>
<td>MATH 176</td>
</tr>
<tr>
<td>Economics, BA</td>
<td>MATH 124 or higher</td>
<td>Higher math is acceptable</td>
<td>ECON 102</td>
</tr>
<tr>
<td></td>
<td>MATH 126 or higher</td>
<td>Student who takes 124 waived into 176</td>
<td>MATH 176</td>
</tr>
<tr>
<td>Economics, BSBA</td>
<td>MATH 124 or higher</td>
<td>Higher math is acceptable</td>
<td>MATH 127 or higher</td>
</tr>
<tr>
<td></td>
<td>MATH 126 or higher</td>
<td>Student who takes 124 waived into 176</td>
<td>MATH 176</td>
</tr>
<tr>
<td>Entrepreneurship, BSBA</td>
<td>MATH 124 or higher</td>
<td>Higher math is acceptable</td>
<td>MATH 127 or higher</td>
</tr>
<tr>
<td>Finance, BSBA</td>
<td>MATH 124 or higher</td>
<td>Higher math is acceptable</td>
<td>MATH 127 or higher</td>
</tr>
<tr>
<td></td>
<td>MATH 126 or higher</td>
<td>Student who takes 124 waived into 176</td>
<td>MATH 176</td>
</tr>
<tr>
<td>General Business, BSBA</td>
<td>MATH 124 or higher</td>
<td>Higher math is acceptable</td>
<td>MATH 127 or higher</td>
</tr>
<tr>
<td>Info Management/Info Systems, BSBA</td>
<td>MATH 124 or higher</td>
<td>Higher math is acceptable</td>
<td>MATH 127 or higher</td>
</tr>
<tr>
<td></td>
<td>MATH 126 or higher</td>
<td>Student who takes 124 waived into 176</td>
<td>MATH 176</td>
</tr>
<tr>
<td>International Business, BSBA</td>
<td>MATH 124 or higher</td>
<td>Higher math is acceptable</td>
<td>MATH 127 or higher</td>
</tr>
<tr>
<td></td>
<td>MATH 126 or higher</td>
<td>Student who takes 124 waived into 176</td>
<td>MATH 176</td>
</tr>
<tr>
<td>Management, BSBA</td>
<td>MATH 124 or higher</td>
<td>Higher math is acceptable</td>
<td>MATH 127 or higher</td>
</tr>
<tr>
<td></td>
<td>MATH 126 or higher</td>
<td>Student who takes 124 waived into 176</td>
<td>MATH 176</td>
</tr>
<tr>
<td>Marketing, BSBA</td>
<td>MATH 124 or higher</td>
<td>Higher math is acceptable</td>
<td>MATH 127 or higher</td>
</tr>
<tr>
<td></td>
<td>MATH 126 or higher</td>
<td>Student who takes 124 waived into 176</td>
<td>MATH 176</td>
</tr>
<tr>
<td>Real Estate, BSBA</td>
<td>MATH 124 or higher</td>
<td>Higher math is acceptable</td>
<td>MATH 127 or higher</td>
</tr>
</tbody>
</table>

Evident by the table above, transferring business students who successfully complete MATH 124 will be allowed to enroll directly into MATH 176 at all institutions. Should a student change majors upon transfer, a different math course (or courses) may be required, depending on the selected program of study.

At NSC, students enrolled in the Bachelor of Science for Business Administration are required to complete MATH 120 for their bachelor’s degree. If those students were to transfer to either university, they would need to take the appropriate mathematics course for the pathway at that institution. However, according to recent transfer data the number of students transferring from NSC to UNR or UNLV is extremely low and for recent years it was zero. Therefore, we do not believe it is prudent to require NSC to align its gateway math requirement with either of the universities. It is incumbent on NSC to ensure in those very rare cases that students who may transfer from NSC to a business program at UNR or UNLV the students are aware they will have to take MATH 124 or MATH 126.

Health Sciences
Health science programs at UNLV and UNR are distinct from each other and do not have much overlap. The current pathways in place at each institution provide for the appropriate mathematics coursework for a student in that major field of study. It is important to note that there have been no recent transfers in health sciences between the two universities. Due to the unique nature of the coursework within each program, transfer from a health science program at one institution to a health science program at another is generally not feasible. The community colleges will align with their regional four-year institution(s) in terms of math course requirements for each program of study.
Conclusion
As a result of this review, it is recommended that the course numbering for MATH 124 and MATH 126 remain in place with no revision as there is no detrimental impact on students transferring. Further, the current gateway courses for business and health sciences do not conflict with the Board’s desire for common gateway courses by discipline. No further action on the part of the Corequisite Mathematics Implementation Task Force is necessary at this time.