

THE UNIVERSITY OF NORTH CAROLINA ASHEVILLE

FACULTY SENATE

Senate Document Number SD1223F

Date of Senate Approval 12/07/2023

Statement of Faculty Senate Action:

APC Document 8 (MATH): **Change the demonstration of competency in Mathematics**

Effective Date: Fall 2024

1. Delete: On pages 239-240, Section III under **Concentration in Pure (Theoretical) Mathematics,**
Concentration in Applied Mathematics, Concentration in Statistics, and Mathematics with Teacher Licensure:

III. Other departmental requirements—Satisfactory performance on a comprehensive Mathematics exam and the satisfactory presentation of one seminar in MATH 480.

Add: On pages 239-240, in place of deleted entries:

III. Other departmental requirements—Major competency is demonstrated in MATH 480. The course must be completed with a grade of C or higher to graduate.

Impact: The Major Field Achievement Test (MFAT) is a large cost to the department at \$36.50 per student, and therefore removing the use of the MFAT will allow these funds to be used to support other department initiatives. All majors are required to take MATH 480: *Mathematics Seminar*, and therefore using MATH 480 for competency has no impact on resources or staffing.

MATH 381: *Problems in Mathematics* has been coupled with students' completion of the MFAT for Mathematics (students take the test during the final exam period), but the connection between MATH 381 and the MFAT has been coincidental only. Removing the MFAT requirement will allow the department to utilize the final exam period with an activity or assessment that more closely aligns with the goals of MATH 381.

This change in the way major competency is demonstrated will apply to all students regardless of the catalog under which they are declared.

Rationale: Currently, the Major Field Achievement Test (MFAT) for Mathematics, a standardized test produced by ETS, has been used as one measure of math students' major competency. If students do not attain the minimum score to pass, the student can fulfill this requirement through writing an expository paper, which is then assessed by our department competency committee. The department no longer believes the benefit is worth the cost of the MFAT. Mathematics majors are required to take MATH 480: *Mathematics Seminar*, a capstone course in which students research a mathematical topic suitable to their plan of study, write an expository paper, and present their findings to the department. Successful completion of MATH 480 effectively demonstrates competency in the discipline.