TO: Elementary Education Council FROM: Mathematics Education Faculty RE: Prerequisites for N102 and N103

DATE: October 8, 2009

In the last few years the Mathematics Education Faculty developed and began offering courses on teaching and learning elementary school mathematics (EDUC-N 102 and EDUC-N 103) for our elementary majors. These courses meet two of the requirements of the Mathematics sequence T101, T102, T103. Since its inception, we have had the practice of requiring students to earn a grade of C or better in MATH-T 101 in order to enroll in N102 or N103. MATH-T 101 focuses on our system of numeration and arithmetic, essential topics in the elementary school curriculum. This practice has not affected enrollment in the N courses and has helped ensure that students get the most out of the N courses and are well prepared to teach the elementary school mathematics curriculum. We are requesting that this practice of requiring C or better in MATH-T 101 becomes an official prerequisite for the EDUC-N 102 and EDUC-N 103 courses. Furthermore, we recently had approval within the School of Education for a new course EDUC-N 101, which can be substituted for MATH-T 101. Once N101 is approved by the university we would like the course prerequisites for N102 and N103 to include getting a grade of C or better in EDUC-N 101. The course description for T101 is below.

Mathematics | MATH FOR ELEMENTARY TEACHERS 1 T101 | ALL | --

Mathematics for Elementary Teachers I (3 cr.) P: M014, M018 or a score of at least 10 on the Math Skills Assessment Exam. Elements of set theory, counting numbers. Operations on counting numbers, integers, rational numbers, and real numbers. Only open to elementary education majors.

Rationale

- 1. The topic of Number and Operations is the hallmark of the elementary school mathematics curriculum. The study of number and operations provides opportunities for prospective teachers to create meaning for what many had only committed to memory but never really understood. These topics are not addressed again in T102, N102, T103, N103, thus T101 and N101 provide the last opportunity for our elementary majors to gain the needed understandings of these topics so that they will be able to teach them in meaningful ways.
- 2. The topic of number and operations is not the focus of N102 or N103; however a minimal understanding of this topic is needed to be able to understand the topics studied in N102 and N103. EDUC-N 102 focuses on learning and teaching selected topics in probability and statistics. EDUC-N 103 focuses on learning and teaching selected topics in geometry and measurement.
- 3. At our request, the Mathematics Department included these prerequisites for their T102 and T103 courses. We would like all equivalent courses to have similar requirements.