Course Description for Math 167: Elementary Number Structure.

Credit 3 hours. Prerequisite: Math 160 or Math 161. Basic concepts of fractions, decimals, percentage, geometry, computational facility, number theory, and problem solving. This course may not be used to satisfy the General Education requirements.

Goal:

The overall goal of this course is to develop future elementary teachers who have an in-depth understanding of the structure of the real number system, and can successfully communicate and apply this knowledge.

Objectives:

Students who successfully complete this course will be able to demonstrate their understanding by working problems and in-class presentations which include: basic concepts relative to number theory, problem solving, computational facility, fractions, decimals, and geometry.

Each objective is coded with the COEHD Conceptual Framework (CK=content knowledge; KL=knowledge of learner; SM=strategies and methods; PS=professional standards; T=technology; D=diversity).

Students who successfully complete this course will be able to:

- demonstrate understanding of various problem solving strategies. (CK)
- demonstrate a conceptual understanding of operations within the real number systems and the ability to properly explain these operations using multiple methods. (CK, KL, SM, D)
- demonstrate their ability to perform calculations using real numbers at an acceptable proficiency. (CK)
- demonstrate how their understanding of the properties of real numbers can be used to justify mathematical manipulations. (CK, KL, SM)
- demonstrate the connection between algebraic and geometric representations of the real number system and its basic operations. (CK, KL, SM)