Math 310: Mathematical Structures   **(4-0-4)**
November 10, 2016

Catalog Description: Introduction to proof and mathematical abstraction. Topics include logical statements, sets, set operations, functions, and relations.

Prerequisite: MATH252 with grade C or better.

Course Objectives: After completing this course, students will be able to:

1. Construct proofs.

2. Prove statements about sets.

3. Establish and use properties of relations.

Learning Outcomes and Performance Criteria

1. Construct proofs.

   Core Criteria:

   (a) Determine whether an object satis es a de nition. If not, explain why not.
   (b) Give an example that satis es a given de nition.
   (c) Prove a given statement is true or provide a counter example.
   (d)

(b)