A. Course Description

Credits: 1

Lab Hours/ Weeks: Corequisites: None

Lecture Hours/ Week :

MnTC Goals: None

MATH 380 Preparing for MN Licensure Content Exam will prepare pre-service teachers for the mathematics content exam required for licensure in the state of Minnesota.

B. Course Effective Dates: 05/08/2019 - 12/15/2019

C. Outline of Major Content Areas:

See Course Description for major content areas.

D. Learning Outcomes (General)

1. Apply number theory algorithms and procedures to problems
2. Analyze/interpret quantitative data verbally, graphically, symbolically, and numerically
3. Use mathematical concepts in problem-solving through integration of mathematical models
4. Analyze linear and nonlinear functions and their applications
5. Apply trigonometry and calculus to solve complex, continuous problems
6. Apply principles of coordinate and transformational geometry to analyze figures and shapes
7. Collect, present, and analyze data
8. Use the principles of probability to understand random events
9. Differentiate between the processes and applications of discrete mathematics and those of continuous mathematics
10. Describe mathematical connections to the world and communicate those connections
11. Integrate reading skills into the learning of mathematics

E. Learning Outcomes (MN Transfer Curriculum)

This contains no goal areas.

G. Special Information

Co-requisites: MATH 471 Abstract Algebra. Note: This course must be taken during semester of graduation.