

OFFICIAL SYLLABUS
MATH 112B – MATHEMATICS FOR ELEMENTARY TEACHING
Adopted – Fall 2010¹
(Committee: Drs. M. Hasty, C. Traub, T. Voepel)

Catalog Description. These courses (Math 112a & 112b) are designed to meet state certification standards for elementary teachers. a) Number Sense and Algebra; b) Probability, Statistics, and Geometry.

Textbook – *MATHEMATICS FOR ELEMENTARY TEACHERS, A CONCEPTUAL APPROACH*, by Bennett, Burton, & Nelson (9th Edition)

Course Outline and Topics

Chapter 7 – Statistics

- 7.1 Collecting and Graphing Data
- 7.2 Describing and Analyzing Data
- 7.3 Sampling, Predictions, and Simulations

Chapter 8 – Probability

- 8.1 Single-Stage Experiments
- 8.2 Multistage Experiments

Chapter 9 – Geometric Figures

- 9.1 Plane Figures
- 9.2 Polygons and Tessellations
- 9.3 Space Figures
- 9.4 Symmetric Figures

Chapter 10 – Measurement

- 10.1 Systems of Measurement
- 10.2 Area and Perimeter
- 10.3 Volume and Surface Area

Chapter 11 – Motions in Geometry

- 11.1 Congruence and Constructions
- 11.2 Congruence Mappings
- 11.3 Similarity Mappings

Any instructor should cover all of the material specified, additional sections are optional.

¹ Moved to 9th Edition in 2012