MA 139   STUDY GUIDE

The following content can be found in a mathematics text for elementary education majors, such as *Mathematics for Elementary Teachers: A Conceptual Approach* by Albert Bennett and L. Ted Nelson, McGraw Hill, 2004.

1. Introductory geometry: basic concepts of line, angle, segment, ray, polygon, etc.

2. Regular polygons: measure of vertex angles and exterior angles.

3. Elementary constructions with compass and straightedge.

4. Triangle congruence.

5. Similar figures.

6. Polyhedra: Platonic solids, prisms, and pyramids, including the relationship among the number of vertexes, faces, and edges.

7. Measurement: perimeter and area of polygons and circles, Pythagorean theorem, surface area and volume of polyhedra.

Students should bring to the exam a compass, a straightedge, and a scientific (non-programmable, non-graphing) 1-line display calculator.

4/05