## Math 120 Course Content and Objectives

| COURSE CONTENT AND SCOPE <br> - Lecture: Outline the topics included in the lecture <br> portion of the course (Outline reflects course description, all <br> topics covered in class). | Hours <br> Per <br> Topic | COURSE OBJECTIVES - Lecture:Upon <br> successful completion of this course, the student <br> will be bale to..(Use action verbs - see Bloom's <br> Taxonomy for'action verbs requiring cognitive |
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| Constructions: Perpendicular bisection of line <br> segment, angle bisection, perpendiculars and <br> parallels, regular polygons, concurrent cevians, <br> tangents to circles, and square root. | 30 | Construct perpendiculars, bisectors, and <br> congruent angles using compass and <br> straight edge. |
| Measurement: Length, angles, proportions, area, and <br> volumes. | 28 | Apply algebraic methods to find angle <br> measures. Analyze figures containing <br> congruent triangles. Use proportions to <br> determine the measures of corresponding <br> sides of similar figures. Apply the <br> Pythagorean theorem. Find areas of <br> various polygons. Analyze circles and <br> use various properties to measure arcs. |
| Synthetic reasoning: Definitions, axioms, postulates, <br> and proofs. | 30 | Demonstrate confidence in the use of <br> logical reasoning. Formulate an indirect <br> proof. Formulate direct proofs. |
| Final examination. | 2 | Final examination. |
| Total Lecture Hours In Section I Class Hours: | 90 |  |

