Mrs. Thomas's
Geometry Course Outline

Chapter 1 Tools of Geometry
1-2 Points, Lines, and Planes
1-3 Measuring Segments
1-4 Measuring Angles
1-5 Exploring Angle Pairs
1-6 Basic Constructions
1-7 Midpoint and Distance in the Coordinate Plane
1-8 Perimeter, Circumference, and Area

Chapter 2 Reasoning and Proof
2-1 Patterns and Inductive Reasoning
2-2 Conditional Statements
2-3 Biconditionals and Definitions
2-4 Deductive Reasoning
2-5 Reasoning in Algebra and Geometry
2-6 Proving Angles Congruent

Chapter 3 Parallel and Perpendicular Lines
3-1 Lines and Angles
3-2 Properties of Parallel Lines
3-3 Proving Lines Parallel
3-4 Parallel and Perpendicular Lines
3-5 Parallel Lines and Triangles
3-6 Constructing Parallel and Perpendicular Lines
3-7 Equations of Lines in the Coordinate Plane
3-8 Slopes of Parallel and Perpendicular Lines

Chapter 4 Congruent Triangles
4-1 Congruent Figures
4-2 Triangle Congruence by SSS and SAS
4-3 Triangle Congruence by ASA and AAS
4-4 Using Corresponding Parts of Congruent Triangles
4-5 Isosceles and Equilateral Triangles
4-6 Congruence in Right Triangles
4-7 Congruence in Overlapping Triangles

Chapter 5 Relationships Within Triangles
5-1 Midsegments of Triangles
5-2 Perpendicular and Angle Bisectors
5-3 Bisectors in Triangles
5-4 Medians and Altitudes
5-6 Inequalities in One Triangle
5-7 Inequalities in Two Triangles

Chapter 6 Polygons and Quadrilaterals
6-1 The Polygon Angle-Sum Theorem
6-2 Properties of Parallelograms
6-3 Proving That a Quadrilateral is a Parallelogram
6-4 Properties of Rhombuses, Rectangles, and Squares
6-5 Conditions for Rhombuses, Rectangles, and Squares
6-6 Trapezoids and Kites
6-7 Polygons in the Coordinate Plane
6-8 Applying Coordinate Geometry
6-9 Proofs Using Coordinate Geometry
MIDTERM EXAM (SLO)

Chapter 7 Similarity
7-1 Ratios and Proportions
7-2 Similar Polygons
7-3 Proving Triangles Similar
7-4 Similarity in Right Triangles
7-5 Proportions in Triangles

Chapter 8 Right Triangles and Trigonometry
8-1 The Pythagorean Theorem and Its Converse
8-2 Special Right Triangles
8-3 Trigonometry
8-4 Angles of Elevation and Depression
8-5 Laws of Sines
8-6 Laws of Cosines

Chapter 9 Transformations
9-1 Translations
9-2 Reflections
9-3 Rotations
9-4 Composition of Isometries
9-5 Congruence Transformations
9-6 Dilations

Chapter 10 Area
10-1 Areas of Parallelograms and Triangles
10-2 Areas of Trapezoids, Rhombuses, and Kites
10-3 Areas of Regular Polygons
10-4 Perimeters and Areas of Similar Figures
10-5 Trigonometry and Area
10-6 Circles and Arcs
10-7 Areas of Circles and Sectors
10-8 Geometric Probability

Chapter 12 Circles
12-1 Tangent Lines
12-2 Chords and Arcs
12-3 Inscribed Angles
12-4 Angle Measures and Segment Lengths
12-5 Circles in the Coordinate Plane

Chapter 13 Probability

Chapter 11 Surface Area and Volume (If time prevails)

FINAL EXAM