Recommended Advanced Geometry Curriculum Framework

Content: MATHEMATICS – ADVANCED GEOMETRY						
Topic: Unit 9 The Pythagorean Theorem 11days						
Content (What do your students need to KNOW?)	**Demonstrators** (What do your students need to be able to DO?)	**Assessment** (How will you assess what your students ALREADY KNOW, and assess WHAT THEY'VE LEARNED?)	**Activities** (HOW will you teach it?)	**Resources** (What MATERIALS will you need?)	**Differentiation** (How will you reach the DIVERSITY of learners?)	**Literacy Connection** (How will you use READING and WRITING with this material?)
MA-H-1.1.3 Students will apply real numbers to both real-world and mathematical situations. **MA-H-2.2.4** Students will use Pythagorean relationships to solve problems in real-world and mathematical situations. **MA-H-2.3.1** Students will solve real-world geometry problems by using algebra. **MA-H-2.3.2** Students will apply algebra to solve problems involving geometric figures in a coordinate plane. **MA-H-2.1.5** Students will describe properties of, define, give examples of, and apply to both real-world and mathematical situations right triangle trigonometric measures (sine, cosine, tangent).	**Academic Expectations** **1.5 - 1.9** Students use mathematical ideas and procedures to communicate, reason, and solve problems. **2.9** Students understand space and dimensionality concepts and use them appropriately and accurately. **2.11** Students understand mathematical change concepts and use them appropriately and accurately. **2.10** Students understand measurement concepts and use measurements appropriately and accurately. **Program of Studies** **M-H-G-8** Students will use Pythagorean theorem and its converse. M-H-G-4 Students will connect geometric diagrams with algebraic representations. **M-H-G-9** Students will use right triangle relationships such as trigonometric ratios (45-45-90 and 30-60-90 triangles).			Competency Assurance: • Breaking down the Field • Closet and skis Supplement Trig Ratios		