**Lesson Plan Outline Geometry in Construction**

**Title:**

Tangent Lines to Circles

**Objective(s):**

Students will explore the relationship between tangent lines, chords, radii, and angle measurements

**Learning Standard(s):**

[CCSS.MATH.CONTENT.HSG.C.A.2](http://www.corestandards.org/Math/Content/HSG/C/A/2/)

Identify and describe relationships among inscribed angles, radii, and chords. *Include the relationship between central, inscribed, and circumscribed angles; inscribed angles on a diameter are right angles; the radius of a circle is perpendicular to the tangent where the radius intersects the circle.*

**Activities:**

Students will use technology to discover the relationship between tangent lines, chords, radii, and angle measurements

Students will solve application problems involving properties of lines, chords, angles, and arcs.

**Materials:**

iPad with Geometry Pad App

Tangent Lines W.S.