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Diane Barrett* (dbarrett@sjfc.edu), St. John Fisher College, 3690 East Avenue, Rochester, NY 14618. *A Multi-Angled Approach to Geometry for Secondary Mathematics Teachers*. Preliminary report.

This presentation discusses how a content course in Non-Euclidean Geometry for Preservice Secondary Mathematics Teachers (PSMT) can be mathematically demanding and still be relevant to what these PSMT will themselves be teaching. While developing a deeper understanding of the content, the students were required to think like professional mathematicians as they explored non-Euclidean geometries. This included topics in finite, Lobachevskian and Riemannian geometries. At the same time, connections were made as to how this content relates to the high school curriculum. Throughout the course, students were not only engaged in rigorous proof but also explored the pedagogical content knowledge of geometry. (Received July 20, 2006)