1067-E1-1249 **Vesna Kilibarda*** (vkilibar@iun.edu), Indiana University Northwest, Department of Mathematics and Actuarial Sci., 3400 Broadway, Gary, IN 46408. *Geometry for Prospective Mathematics Teachers*.

We teach a geometry course for prospective mathematics teachers pursuing undergraduate Secondary Education and graduate Transition-to-Teaching programs. Selection of student learning goals, appropriate activities and projects, assessment items, and use of technology are all guided by NCTM standards and principles. We created effective classroom activities using dynamic software that connects transformational and analytic geometry. In developing synthetic Euclidian geometry we emphasize a historic perspective. To investigate non-Euclidean geometries we use Lenart spheres and explore the Poincare disk model of a hyperbolic plane with Java applets. Two-part examinations (take-home and in-class) allow for in-depth problem solving. Students use the Drop Boxes in our course management system to deposit homework and exams with all constructions done with dynamic software. Students spend a class period with a reference librarian who helps them research a topic in depth that they have chosen for the group project. They are able to share drafts of group projects and presentations among group members and with the instructor. The whole class is involved in grading these projects using appropriate rubrics. Examples of class activities and students' projects will be shown in the paper. (Received September 20, 2010)