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**Brynja R Kohler\*** (brynja.kohler@usu.edu), Dept of Mathematics and Statistics, Logan, UT 84322, and **William S Tidwell**. *Mathematical Modeling Curriculum Material for Secondary Teacher Education*.

Several years ago, the Mathematics Teacher Education Partnership formed a research action cluster with the aim of developing pre-service mathematics teachers' mathematical knowledge for teaching (MKT) in various content courses. This research action cluster, called the Mathematics of Doing, Understanding, Learning, and Educating for Secondary Schools [MODULE(S2)], is now piloting curriculum materials in college geometry, abstract algebra, statistics, and mathematical modeling with faculty across the country. The mathematical modeling course engages pre-service teachers in mathematical modeling activities, metacognition on the process of modeling, and reflection on best practices for implementing this type of learning in secondary schools. In this presentation, we'll introduce the mathematical modeling curriculum materials, describe the themes and key ideas from each module, the structure and flow of lessons, features of materials for instructors and students, and share activities that focus on developing MKT specific to mathematical modeling including "Fighting Floods with Sandbags" from Module 1, "Modeling Memorization" from Module 2, and "Area of Sioux Reservation Land" from Module 3. (Received September 04, 2020)