

1106-A1-2419 **Teresa E. Moore*** (moore@ithaca.edu), Dept. of Mathematics, Ithaca College, 953 Danby Rd., Ithaca, NY 13732, and **L. Christine Kinsey**. *Trisections in the Undergraduate Geometry Classroom*. Preliminary report.

In our Modern Geometry course for junior and senior math majors, we introduce students to trisections. We do this either as in class activities or an out of class project. The topic of trisections allows students to blend physical, technological and theoretical approaches to find geometric solutions in many different media and compare them. Students construct origami, linkage and software solutions. They study the history of the problem, and those doing the project independently explore the connection to Galois theory. We encourage students to create solutions but recognize that most spend their effort understanding solutions previously discovered. Students doing a project present what they have learned to the class and write a short expository paper. When the activities are done in class or as short homework exercises, we have a group discussion about different ways of learning and relate the material to traditional geometry problems. (Received September 16, 2014)