

1077-B1-2572 **Gareth E Roberts*** (groberts@radius.holycross.edu). *Composing with Mathematics: Final Projects in a Math and Music Course.*

As a major requirement for a math and music course I have taught several times, students are asked to complete a final project consisting of a musical composition and performance demonstrating some of the mathematical concepts discussed in the course. After studying examples of how composers utilize mathematical concepts in their work, (e.g., Bach, Hadyn, Bartók, Davies and Reich), students seek to integrate their own analytic and artistic skills by composing a piece of music featuring some mathematical connection. Many students find the assignment challenging yet gratifying and consider it their favorite aspect of the course. We'll discuss and listen to some recent examples, and explain how students with little or no musical background are prepared for such a difficult assignment. (Received September 22, 2011)