Barbara T Faires* (fares@westminster.edu), Mathematics and Computer Science, Westminster College, New Wilmington, PA 16143. Building Reason: Baroque History and Mathematics.

"Art, Architecture, and Mathematics" is the title of the mathematics course that was clustered with a history course (European History: 1600 - 1815) in Oxford, UK, Fall 2006. With George Hersey’s book "Architecture and Geometry in the Age of the Baroque" as the text for the mathematics course, the focus was on the works of Bernini, Blondel, Guarini, and Wren. Rather than starting with a building, however, we followed Hersey who begins with works of mathematicians, scientists, and instrument builders. This paper discusses the architecture derived from abstract mathematical ideas in the Baroque era as well as the reappearance of many of these ideas in twentieth century architecture and the mathematics course developed around these. In addition to St. Paul’s in London, we examine structures derived from the cube, spiral, and conic sections. This particular course was greatly enhanced by its location at Oriel College, Oxford; however, the course is scheduled to be offered, clustered again with the history course, in fall 2008 on the Westminster campus. (Received September 20, 2007)