1014-F1-1726 Kyehong Kang* (kang@math.lamar.edu), 7683 Boardwalk, Lumberton, TX 77657. A Mathematica and XML-based Content Management System for the Delivery of Online Mathematics Courses.

Despite the recent popularity of web-based mathematics courses in universities, online mathematics courses are often not built upon a systematic content management system tailored for online mathematics courses. As a result, the possibility of reusability or even substantial revision is a remote reality. To address this, we propose and describe the content management system based on Mathematica and XML (eXtensible Markup Language), which allows content writers to edit, revise, and update course materials with ease. We will also describe how the system has been successfully used in developing the online mathematics courses at Virginia Tech and deployed at Math Emporium. (Received September 28, 2005)