

Meeting: 1003, Atlanta, Georgia, MAA CP C1, MAA Session on Courses Below Calculus: A New Focus, I

1003-C1-582 **Brian P. Kelly*** (kelly@ulm.edu), 305 Airway Building, CSMP, Univ. of Louisiana at Monroe, Monroe, LA 71210. *A Final Course in Mathematics for Humanities Majors.*

At the University of Louisiana at Monroe, we have designed a liberal arts mathematics course using the following two principles. First, the content would consist of topics rich in applications while only requiring college algebra as a prerequisite. Second, the teaching methods would heavily involve discovery learning and cooperative learning.

These principles are consequences of the fact that this is the last mathematics class for virtually the entire target audience. The philosophy is that at this point it is most important to show the students the breadth of mathematics applications around them and to give them opportunities to “create” mathematics.

For example, modular arithmetic, which is easily accessible for the target audience, provides a wealth of relevant applications such as check digit schemes. We use cooperative learning activities first with “clock arithmetic” to motivate the definitions and again when studying security of check digit schemes to round out the unit.

The passing rate for this class is significantly higher than for other post-algebra courses in our catalog such as elementary statistics or trigonometry. Furthermore, the feedback from evaluations shows that the class greatly expands the students’ perspectives of mathematics. (Received September 23, 2004)