

1035-H1-1642 **David C. Carothers*** (carothdc@jmu.edu), Department of Mathematics and Statistics, James Madison University, Harrisonburg, VA 22801. *The Mathematics of Change for Middle Grades Teachers, an Alternative to Calculus*. Preliminary report.

The Conference Board of the Mathematical Sciences and many state Boards of Education recommend a course in calculus for future middle grades teachers. Traditional calculus courses for science, engineering, or business do not address many of the objectives for teacher preparation and stress a set of skills that may be of limited use for future teachers. This talk will consider a course in the Mathematics of Change with a focus on more meaningful pattern and problem solving strategies, greater emphasis on properties of the real numbers than is normally present in a traditional calculus class, and consideration of both discrete and continuous modeling. (Received September 20, 2007)