Michelle Y Penner* (pennerm@cvcc.vccs.edu), Central Virginia Community College, 3506 Wards Road, Lynchburg, VA 24502-2498. Newton and Fibonacci: Estimating The Golden Ratio.

This talk starts with an overview of some of the historical and cultural occurrences of Fibonacci numbers and the golden ratio. The second part of will prove that in using Newton’s Method to estimate the golden ratio, if the seed is a ratio of adjacent Fibonacci numbers, then the resulting estimate is again a ratio of adjacent Fibonacci numbers. (Received September 16, 2008)