

1077-L5-930

Paul Taylor* (pttaylor@ship.edu), Department of Mathematics, Shippensburg University, 1871 Old Main Drive, Shippensburg, PA 17257. *Using MS Excel to Improve Understanding of Financial Mathematics.*

A helpful way motivate students to improve their quantitative literacy is to use examples from personal finance. However, beyond compound interest the mathematics threatens to overwhelm students in a typical general education course. A perfect example is a level payment annuity, such as a mortgage repayment plan. Students appreciate the relevance of the topic but the derivation of the mathematical model is quite complex. In our general education course in financial mathematics, students use Microsoft Excel to reduce the model to simpler components of individual payments and interest charges. When the students can see the structure underlying the model, they achieve a much deeper understanding. This approach helps reduce the mystery behind their bills, making students more likely to consider personal matters of mathematics and finance with confidence rather than fear or avoidance. (Received September 14, 2011)