

TEACHING THE BLACK-SCHOLES OPTION PRICING MODEL: AN INCREMENTAL APPROACH

*Daryl Ono, Keller Graduate School of Management, DeVry University, 901 Corporate Center Drive,
Pomona, CA, 91768, 626-307-5227, onodk@sce.com*

ABSTRACT

This paper will introduce a method to teach the Black-Scholes (“Black-Scholes”) Option Pricing Model in an incremental fashion, a step-by-step approach to develop the proper financial fundamentals. The target audience for this paper are those instructors who are teaching the Black-Scholes (“Black-Scholes”) Option Pricing Model to students who have never been exposed to the Black-Scholes model previously. The students should have the necessary quantitative background outlined below and may be intimidated by the Black-Scholes model when they encounter it initially, but the proposed method will take a holistic approach which should build confidence in the students and alleviate their misgivings.

SUMMARY

A well-conceived, step-by-step approach is invaluable to successfully teach the Black-Scholes (“Black-Scholes”) Option Pricing Model. The Black-Scholes (“Black-Scholes”) Option Pricing Model is dependent on a variety of quantitative techniques, so the instructor must be certain that students are comfortable with all these techniques to comprehend and successfully apply the Black-Scholes (“Black-Scholes”) Option Pricing Model.

These are the incremental steps to successfully facilitate a lecture of the Black-Scholes (“Black-Scholes”) Option Pricing Model:

1. Time value of money lecture
2. Expected monetary value (EMV) lecture
3. Normal distribution lecture
4. Calculations based on the Black-Scholes (“Black-Scholes”) Option Pricing Model
5. Scenario analysis

While the incremental approach is important to teach any concept in finance theory, it is especially important to teach the theory of option pricing. Its lecture preparation is tedious for the teacher and the actual instruction is time consuming and sometimes frustrating, but the end products are students who can successfully apply the Black-Scholes (“Black-Scholes”) Option Pricing Model. This will develop managers with better critical thinking skills and finance practitioners with the intuition to solve most complex finance problems they will face.