



## COLLOQUIUM

A MILK- URP LECTURE  
MATHEMATICS INQUIRY LEARNING AT KUTZTOWN  
UNDERGRADUATE RESEARCH PRESENTATIONS

11:00 A.M.  
THURSDAY, APRIL 14, 2011  
LYTLE HALL 228

### *On the Rudiments of Linear Regression Analysis*

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B.S.-MATHEMATICS & B.S.B.A.-FINANCE

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#### ABSTRACT

The term regression analysis was first used by Francis Galton in the late nineteenth century in connection with his work on the relationship between father's height and son's height. Today, regression analysis is performed by individuals in both the physical and social sciences. Many of these individuals perform this type of analysis in programs such as Excel, SPSS, Minitab, and SAS without a true understanding of what is actually occurring.

This talk is designed to provide a theoretical focus on the aspects of simple linear regression. More specifically, the coefficients of the linear regression line will be examined. How are these coefficients derived? Do the coefficients provide an accurate estimate of the true population parameters? These are just a few of the questions that will be answered.

Furthermore, the concept of a "best" linear unbiased estimator will be discussed and its relevance toward simple linear regression.

**10:45 a.m.**  
**refreshments served**

**11:00 a.m.**  
**talk begins**

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