

Math Factor/Math Department Seminar

Title: Using Math (statistics) and logic to make discoveries in any

discipline

Speaker: Greg Stoddard, MBA, MPH, Co-Director, Study Design and

Biostatistics Center, University of Utah School

Abstract: Making discoveries in Nature, such as finding the optimal settings in manufacturing, or what causes cancer, requires the use of mathematics. In particular, it requires statistics, since multicausality makes data very fussy, so ordinary

deterministic mathematics, such as calculus or differential equations, fail to fit the data. Statistics gets us part way there, but it also requires several constructs in logic and a carefully planned study design. Professor Stoddard will bring all of these ideas together to show how discoveries are made in Nature. He will also talk about the benefits of graduate studies,

how to prepare for it, guidance on applying to graduate school, describe the master of statistics program at the University of

Utah, and careers in statistics.