MTHE5325 - Problems Using Mathematical Modeling

MTHE 5325 Problems Using Mathematical Modeling (3 semester credit hours) Selected concepts in mathematical modeling. Solving non-routine problems and adapting them for classroom use and incorporating topics from mathematical modeling into existing high school courses. Topics include the construction, use, and analysis of empirical and analytical mathematical models, using modeling tools such as functions, curve fitting, simulation, matrices, difference and differential equations, finite graph theory. Appropriate technology will be used. May not be used to fulfill degree requirements for mathematical sciences majors except those in the Master of Arts in Teaching (MAT) program. Recommended Prerequisite: A junior-level mathematics course. (3-0) T