CPSE/IP&T 745
MULTIPLE REGRESSION
Winter 2015
Mondays, 1-4, 112 SWKT
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CPSE/IP&T 745 will provide a thorough exposure to multiple regression analysis which is the foundation for a wide variety of subsequent statistical procedures including path analysis, factor analysis, structural equation modeling, and hierarchical linear modeling.

Objectives: Students will:

- Demonstrate ability to design and interpret multiple regression models (including categorical and continuous variables and their interactions) and their coefficients including $F$, $R$, $R^2$, $a$, $b$, $\beta$; zero-order, partial & semi-partial correlations.
- Demonstrate ability to design and interpret path models with manifest variables.
- Demonstrate ability to design and interpret variations in regression models including logistic regression, discriminant function analysis, and exploratory factor analysis.

Required Textbook:


Recommended Textbook:


Learning/Teaching Style:

My preferred style of learning and teaching statistics is to work in small groups. That approximates how good statistical analysis is accomplished. We work on a team to check each other’s work, notice small syntax errors and help interpret the results. It is my preference to organize you into pods with at least one member in each pod that is (relatively) competent in statistics. This strategy is negotiable. I am a strong advocate of a conceptual approach to the teaching of statistics (I could have written Keith’s preface,😊) and have found it to be effective in helping students love the beauty of statistics…even with all its laziness and vagaries.
Grading:

I prefer competency-based grading. You will re-do each assignment until it is correct.

Schedule:

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<td>Error, CFA and SEM (The Measurement and Structural Components)</td>
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