I. Multiple Regression
   A. Assumptions of the standard model
   B. Least squares estimation of regression parameters
   C. Properties of least squares estimators
      1. unbiased
      2. efficient
      3. BLUE (Gauss-Markov theorem)
   D. Measures of fit ($R^2$, corrected $R^2$)
   E. Functional forms
      1. linear in explanatory variables
      2. squared or higher order terms in explanatory variables
      3. logarithms
         a. interpretation of coefficients
         b. elasticities, computed from regression parameters in log-log regression or in levels regression, and computation of $\delta Y/\delta X$ from elasticity in log-log regression
   F. Dummy Variables - implementation - interpretation of coefficients
   G. Hypothesis Testing - individual coefficients (t-tests) - joint hypothesis tests (F-test)

II. Violations of the Standard Model
   A. Heteroskedasticity
      1. definition
      2. properties of OLS estimates
      3. robust standard errors
      4. weighted least squares (WLS)
   B. Serial Correlation
      1. definition
      2. test (Durbin-Watson)
      3. generalized differencing (GLS)
   C. Multicollinearity
      1. definition
      2. detection

III. Panel data
   A. Why use it
   B. Fixed effects
   C. Random effects