We will amend the order of the content of these chapters to allow more project related discussion first. We will assume that you are running multiple regression models in R already.

Sections that pertain more strongly to making progress on the projects:

3.2.1 Regression Function
3.2.2 Reg Coeff Interp
3.2.3 Model Assumptions
3.4.3 Added Variable Plots
3.4.4 Partial Correlation Coeff
3.5.1 Binary Variables
3.5.2 Transform Expl Var
3.5.3 Interaction Terms
4.1 Binary Variables
4.3 One Factor ANOVA
4.4 Combine Cat/Cont Vars
5.1 Iterative Approach
5.2 Automatic Var Selection
5.3 Residual Analysis
5.4 Influential Points
5.5 Collinearity
5.6 Selection Criteria
5.7.1 Detect Heteroscedasticity
5.7.3 Weighted Least Squares
5.7.4 Transformations
6.1 What the Process Tells Us
6.2 Importance of Var Select
6.3 Importance of Data Collect
6.4 Missing Data Models

Sections that develop the underpinnings of multiple regression and give insight into the rules:

Matrix Operations/Derivatives
3.1 Method of Least Squares
3.2.4 Prop of Coeff Estimators
3.3 Estimation and GOF
3.4.1 The t-Test
3.4.2 Confidence Intervals
4.2 Inference for Several Coeff
5.7.2 Heteroscedasticity-Consistent St Err