

	<p>Adequacy</p> <p>2.1 Tests for Linearity</p> <p>2.2 Tests for Normality</p> <p>2.3 Tests for Homoscedasticity</p> <p>2.4 Tests for Independence</p> <p>2.5 Outliers Deletion</p> <p>2.6 Transformations</p>	Weeks 5-6	
	Quiz No. 2	1.5 hours / Week 7	
	<p>3. Multiple Linear Regression</p> <p>3.1 Motivation: Real-world examples</p> <p>3.2 The Multiple Regression Model and its Assumptions</p> <p>3.3 Estimation of Parameters</p> <p>3.4 Using the Model to Make Predictions</p> <p>3.5 Hypothesis Testing and Confidence Intervals for β_i</p> <p>3.6 Full versus Reduced Model: The F Test</p>	12 hours / Weeks 7-11	
	<p>4. Variable Selection and Model Building</p> <p>4.1 Criteria for Selecting Appropriate Models: MSE, C_p, and adjusted R^2</p> <p>4.2 Forward Selection, Backward Elimination and Stepwise Selection Procedures</p>	3 hours / Weeks 11-12	
	Quiz No. 3	1.5 hours / Week 12	
	5. Issues in Regression Modeling (Optional)	1.5 hours / Week 13	

Online Resources

Big Data Analytics, Enterprise Analytics, Data Mining Software, Statistical Analysis, Predictive Analytics.

Accessed October 15, 2012 from: <http://www.statsoft.com>

Chen, X., Ender, P., Mitchell, M. and Wells, C. (2003).