<table>
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<tr>
<th>Week</th>
<th>Subject</th>
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| 1    | Modeling with Spreadsheets  
Topics: Pros and Cons of Spreadsheets, Range Names, Data Tables, Vector Products,  
Array formulas in Excel  
Reading: Chapter 1 Decision Making with Insight (DMI), Part I, Flaw of Averages (FOA) |
| 2    | Understanding Uncertainty with Monte Carlo Simulation  
Topics: Distributions, Central Limit Theorem, Jensen’s Inequality, Interactive Simulation  
Reading: Chapter 2 (DMI), Chapter 9, 10 (FOA) |
| 3    | Monte Carlo Simulation — continued  
Topics: Functions of Random Variables, Modeling Statistical Dependence, Financial  
Portfolios, Hypothesis Testing  
Reading: Chapter 3 (DMI), Chapter 11, 12, 13 (FOA) |
| 4    | Simulation Through Time  
Topics: Discrete Event Simulation, Simple Queues, Queueing Networks, Markov Chains  
Reading: Chapter 4 (DMI) |
| 5    | Forecasting  
Topics: Causal Forecasting, Regression, Time Series, Exponential Smoothing,  
Seasonality.  
Reading: Chapter 5 (DMI), Chapter 11, 12, 13 (FOA) |
| 6    | Decision Analysis  
Topics: Utility, Subjective probability, Decision Trees, Value of Information  
Reading: Chapter 6 (DMI), Chapter 14, 15 (FOA) |
| 7    | Optimization  
Topics: Linear Programming Basics; Product Mix, Transportation, Networks, Scheduling  
Models  
Reading: Chapter 7 |
| 8    | Student Team Presentations |

Books  
Savage, The Flaw of Averages, John Wiley & Sons 2009  
Savage, Decision Making with Insight, Cengage Learning, 2003