# Schedule

## SECTION 1. (Day 1, Morning)

| Registration and Orientation | |
|---|---|
| | Sign-in |
| | Orientation |
| **Part 1. Introduction to Descriptive Statistics** | |
| | Course Objectives and Goals |
| | Descriptive v. Inferential Statistics |
| | 1.1 In-Class Exercise. Descriptive v. Inferential Methods |
| | Populations and Samples |
| | Central Tendency, Dispersion, and Shape |
| | 1.2 In-Class Exercise. Generating Descriptive Statistics |
| | MORNING BREAK |
| **Part 2. Scatter Plots and Correlation** | |
| | Scatter Plots |
| | 2.1 In-Class Exercise. Creating a Scatter Plot |
| | Correlation *(r)* |
| **Part 3. Introduction to Simple Linear Regression** | |
| | Mathematical Description of a Line |
| | Estimating Coefficients of a Simple Linear Equation Using Regression Analysis |
| | 3.2 In-Class Exercise. Regression Error |
| | Deriving a Simple Linear Regression Equation Using Excel |
| | 3.3 In-Class Exercise. Deriving a Simple OLS Linear Regression Model in Excel |
| | MORNING BREAK |
| | Interpreting Linear Regression Output and ANOVA Table |
| | REVIEW QUIZ 1 |
| | LUNCH |

## SECTION 2 (Day 1, Afternoon)



## SECTION 3 (Day 2, Morning)

## SECTION 3 (Day 2, Morning, cont.)

| Part 8. Prediction and Forecasting |
|---|
| Predictions v. Forecasts |
| Prediction Precision v. Forecast Precision |
| Confidence Intervals and Prediction Intervals |
| 8.2 In-Class Exercise. Using the Confidence Interval Estimator |
| Forecasting |
| 8.3 In-Class Exercise. Population Forecast |
| LUNCH |

## SECTION 4 (Day 2, Afternoon)

| Part 9. Depreciation and Multi-Stage Models |
|---|
| Property Age and Physical Depreciation |
| Application: 9.1 In-Class Exercise. Market-Based Physical Depreciation Curve |
| **Part 10. Data Sufficiency and Modeling Limitations** |
| Data Sufficiency |
| 10.1 In-Class Exercise. Sample Size Assessment |
| Modeling Limitations |
| Competency |
| 10.2 In-Class Exercise. Random Sampling |
| AFTERNOON BREAK |
| **Part 11. Combining Two Simple Linear Regression Models into One** |
| Introduction |
| Example |
| 11.1 In-Class Exercise. Developing a Model with Two Intercepts and One Slope |
| REVIEW QUIZ 3 |

## SECTION 4 (Day 2, Afternoon, cont.)

| Part 12. Exam Content Review and Examination |
|---|
| Preparing for the Exam |
| Guidance on Taking the Final Exam |
| Test-Taking Strategies |
| Content Review: Learning Objectives and Terms and Concepts to Remember |
| Evaluations and Other Forms |
| AFTERNOON BREAK |
| Course Examination |

# Section 1