**Lecture**

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| **Schedule** | **Week** |
| Topic 1: Introduction to Statistics   * Types of variables * Organizing and visualizing data * Measures of central tendency * Measures of variation * Exploring numerical data * Use of Excel | 1-2 |
| Topic 2: Basic Probability   * Basic probability concepts * Conditional probability * Counting rules | 3 |
| Topic 3: Discrete and Continuous Probability Distributions   * Discrete probability distribution * Binomial distribution * Continuous probability distribution * Normal distribution | 4,6 |
| No class in week 5 due to public holidays | 5 |
| Topic 4: Sampling Distribution   * Introduction to sampling distribution * Sampling distribution of the sample mean * Sampling from normal population * Sampling from non-normal population | 7 |
| Topic 5: Confidence Interval Estimation for the Population Mean   * Introduction to parameter estimation * Confidence interval estimation for population mean with known standard deviation * Confidence interval estimation for population mean with unknown standard deviation * Sample size determination | 8 |
| Topic 6: Hypothesis Testing for the Population Mean   * Introduction to hypothesis testing * Hypothesis testing for the population mean with known standard deviation * Hypothesis testing for the population mean with unknown standard deviation | 9-10 |
| Topic 7: Confidence Interval Estimation and Hypothesis Testing for the Population Proportion   * Sampling distribution of the sample proportion * Confidence interval estimation for the population proportion * Sample size determination * Hypothesis testing for the population proportion | 11 |
| Topic 8: Simple Linear Regression   * Measuring the association between two numerical variables * Simple linear regression model * Statistical significance of a linear regression model | 12-13 |

**Tutorial**

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| **Week** | **Topic & Questions** |
| 1 | No tutorial |
| 2 | Topic 1: Q1 – Q6 |
| 3 | Topic 1: Q7 – Q12 |
| 4 | Topic 2: Q1 – Q6 |
| 5 | No class |
| 6 | Topic 3: Q1 – Q10 |
| 7 | Topic 3: Q11 – Q17 |
| 8 | Topic 4: Q1 – Q7 |
| 9 | Topic 5: Q1 – Q8 |
| 10 | Topic 6: Q1 – Q2 |
| 11 | Topic 6: Q3 – Q7 |
| 12 | Topic 7: Q1 – Q7 |
| 13 | Topic 7: Q8 – Q11 |
| Revision week | Topic 8: Q1 – Q16 |

**Online Quiz**

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| **Quiz No.** | **Week** | **Topics** | **Date & Time** |
| 1 | 3 | 1 | 19 September 2020 (Sat) 09:00am – 20 September 2020 (Sun) 08:59am |
| 2 | 7 | 2 & 3 | 17 October 2020 (Sat) 09:00am – 18 October 2020 (Sun) 08:59am |
| 3 | 9 | 4 & 5 | 31 October 2020 (Sat) 09:00am – 1 November 2020 (Sun) 08:59am |
| 4 | 13 | 6 & 7 | 28 November 2020 (Sat) 09:00am – 29 November 2020 (Sun) 08:59am |

Assignment 1 (Topic 1 to 2): Due 4 October 2020 (Sun), 11:59pm

Assignment 2 (Topic 3 to 5): Due 15 November 2020 (Sun), 11:59pm