

Lecture

Schedule	Week
Topic 1: Introduction to Statistics <ul style="list-style-type: none">• 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 <ul style="list-style-type: none">• Basic probability concepts• Conditional probability• Counting rules	3
Topic 3: Discrete and Continuous Probability Distributions <ul style="list-style-type: none">• 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 <ul style="list-style-type: none">• 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 <ul style="list-style-type: none">• 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 <ul style="list-style-type: none">• 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 <ul style="list-style-type: none">• 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 <ul style="list-style-type: none">• Measuring the association between two numerical variables• Simple linear regression model• Statistical significance of a linear regression model	12-13

Tutorial

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

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