

STA 215 Videos

The following are links to relevant YouTube videos corresponding to sections of the text *Introductory Applied Statistics: A Variable Approach*, 1st Ed.

Chapter 1 – Data Collection

<i>Section(s)</i>	<i>Topic</i>	<i>YouTube Video Link</i>
1.1	Data	https://www.youtube.com/watch?v=NFF8t6r1IKU
1.2	Core Concepts in Statistics	https://youtu.be/EHEGiHNNHwL8
1.2 & 1.13	Designed Experiments	https://www.youtube.com/watch?v=5crKPD99tfw
1.2 & 1.15	Observational Studies and Confounding Variables	https://www.youtube.com/watch?v=EpwwG4K2VCM
1.3 – 1.5	Sampling Methods and Types of Bias	https://www.youtube.com/watch?v=MSIn8KyQJAY

Chapter 2 – Analysis of One Categorical Variable

<i>Section(s)</i>	<i>Topic</i>	<i>YouTube Video Link</i>
2.1 – 2.3	Descriptive Statistics for One Categorical Variable	https://youtu.be/MNu6aA2Fefs
2.5	Notation	https://youtu.be/15fhDOhwCiQ
2.5	Sampling Distribution	https://youtu.be/UrFXpOuMGIw
2.5	Normal Distribution	https://youtu.be/yqT4PlvN3A4
2.5	Sampling Distribution Example	https://youtu.be/D8rUT37TuRE
2.7 & 2.8	Confidence Intervals	https://www.youtube.com/watch?v=D5CTBNvdXAU
2.7 & 2.8	Confidence Interval for p	https://youtu.be/RXK1YfcnoqU
2.7 & 2.8	Confidence Interval Example	https://youtu.be/NRD6xB0QTSI
2.7 & 2.8	Confidence Interval Example	https://youtu.be/81l0usgvwXU
2.10	Hypothesis Test Vocabulary	https://youtu.be/ScupAkMachU
2.10 – 2.12	Hypothesis Testing Steps	https://youtu.be/zzoMMgzl8jg
2.10 – 2.12	Hypothesis Testing Steps continued	https://youtu.be/cFhBA2cUvEk
2.10 – 2.12	Hypothesis Testing for p (Example 1)	https://youtu.be/8Tynik0nX6M
2.10 – 2.12	Hypothesis Testing for p (Example 2)	https://youtu.be/zbWs5eihDA
2.10 – 2.12	Hypothesis Testing for p (Example 3)	https://youtu.be/VaHSazOs26Q

Chapter 3 – Analysis of One Quantitative Variable

<i>Section</i>	<i>Topic</i>	<i>YouTube Video Link</i>
3.1	Descriptive Statistics for One Quantitative Variable	https://www.youtube.com/watch?v=JFIGS5BM-MI
3.2	Describing a Distribution for One Quantitative Variable	https://youtu.be/LOt15NTbCXM
3.2	Boxplot Basics	https://youtu.be/8R3neVTXA2Q
3.2	SPSS Boxplots	https://youtu.be/kaqrFydz69U
3.4	Describing a Histogram	https://youtu.be/8GI3m9YqY3A
3.5	Calculating Sample Mean and Median	https://youtu.be/dInKIWIopdo
3.7	Normal Probability Problems	https://youtu.be/1sh6qfVRxO8
3.8	Zscores Example	https://youtu.be/--Rk4ZgUZwQ
3.8	Zscores 2 nd Example	https://youtu.be/ur7axozMqcg
3.8	Zscores 3	https://youtu.be/f9o1XV-bXaY
3.9	Sampling Distribution of $\bar{x}$ (x bar)	https://youtu.be/SmXwj0uFw0

Chapter 4 – Analysis of Two Categorical Variables

Section	Topic	YouTube Video Link
4.1	Analysis of Two Categorical Variables	https://youtu.be/wmAsF5QuSWM
4.2	Expected Counts	https://youtu.be/bSAFI5fv914
4.3	Row and Column Percents	https://youtu.be/-Czj8lCWmc8
4.5	Generic Chi-Square	https://youtu.be/lpUzaNLcWdo
4.5	Chi-Square Example 2	https://youtu.be/UV1OWjSGxtQ
4.5	Chi-Square Example 1	https://youtu.be/XxajU89MB-c
4.5	Chi-Square Example 3	https://youtu.be/KvIkC3ocJi8
4.6	Confidence Interval for the Difference in Two Populations	https://youtu.be/PXf0gkq3du0

Chapter 5 – Analysis of Two Quantitative Variables

Section	Topic	YouTube Video Link
5.1	Scatterplot	https://youtu.be/Kf5pIldMaaM
5.2	Correlation Coefficient	https://youtu.be/LduKixRTJJM
5.2	Correlation Coefficient Comparison	https://youtu.be/r_ISqgnYHNM
5.3	Correlation does not imply Causation	https://youtu.be/L4jbAxxnYdQ
5.4	Regression Equation	https://youtu.be/8ysVbA8uwOU
5.5	R Squared	https://youtu.be/9kRZSKxhpMg
5.4	Residuals	https://youtu.be/JFZVDvRahI4

Chapter 6 – Analysis of Independent Two-Group Data

<i>Section(s)</i>	<i>Topic</i>	<i>YouTube Video Link</i>
6.1	Two Independent Group Data	https://youtu.be/V19ySgtShig
6.2 & 6.3	Two Group Independent Graphs	https://youtu.be/OiXnuU7DVqs
6.4	Sample Distribution 2 Independent Groups	https://youtu.be/CWfDTX_najA
6.5	Two Independent Hypothesis Tests Example 1	https://youtu.be/H5DfICVthRU
6.5	Two Independent Hypothesis Tests Example 2	https://youtu.be/cytTeAfaqss
6.6 & 6.7	Two Independent Groups Confidence Interval	https://youtu.be/seqYuwwJoLU
6.6 & 6.7	Two Independent Groups Confidence Interval Setup	https://youtu.be/zuqUppOnsKU
6.5 – 6.7	Confidence Interval and Hypothesis Test Comparison for Two Independent Group Data	https://youtu.be/OJYrLPVJrDo

Chapter 7 – Analysis of Paired Data

<i>Section(s)</i>	<i>Topic</i>	<i>YouTube Video Link</i>
7.1	Paired Data Collection	https://youtu.be/xr--KXT0E2s
7.2	Paired Data Descriptive Statistic	https://youtu.be/fAZCn0pET9s
7.5	Paired Hypothesis Test Example 1	https://youtu.be/Zx9XHBZQFB8
7.5	Paired Hypothesis Test Example 2	https://youtu.be/ShgccLb- IU
7.4	Paired Confidence Interval Example 2	https://youtu.be/Gb1Y-sOcrHg
7.4	Paired Confidence Interval Example 1	https://youtu.be/VXQYhcSquxw
7.3 & 7.4	Sampling Distribution of Paired Data and Confidence Interval Formula	https://youtu.be/_WO52GmueX4

Chapter 8 – Analysis of ANOVA Data

<i>Section</i>	<i>Topic</i>	<i>YouTube Video Link</i>
8.1 – 8.5	Analysis of Variance (ANOVA) Basics	https://youtu.be/kMAb8weDP7I