| **Statistics CP Curriculum Map** | **Resource & Topics** | **SCCCR Standards** |
|---|---|---|

**1st nine weeks**

**Unit 1:  Data Collection and Statistical Studies**

| Chapter/Section | Title of Section |
|---|---|
| 1.1 | What is Statisitics? |
| 1.2 | Random Samples |
| 1.3 | Intro to Experimental Design |

PS.SPCR.1;
SP.SPMJ.6

**Unit 2:  Organizing Data Using Graphs**

| 2.1 | Bar Graphs, Circle Graphs, Time Plots |
|---|---|
| 2.2 | Frequency Distributions and Histograms |
| *2.3* | Stem and Leaf Displays |

PS.SPID.1; 2; 3
6.DS.4;
7.DSP.3;

**Unit 3:  Averages, Variation, and Position**

| 3.1 | Measures of Central Tendancy |
|---|---|
| 3.2 | Measures of Variation |
| 3.3 | Percentiles and Box and Whisker Plots |

6.DS.2; 3;
7.DSP.3; 4

**Unit 4:  Regression and Correlation**

| 4.1 | Intro to Paired Data and Scatter Diagrams |
|---|---|
| 4.2 | Linear Regression |
| 4.3 | Linear Correlation Coeffiecient |

PS.SPID.6; 7; 8; 9; 10;

**Unit 5:  Probability Theory**

| 5.1 | What is Probability? |
|---|---|
| 5.2 | Probability Rules- Compound Events |
| 5.3 | Trees and Counting Techniques |

PS.SPCR.2; 3; 4; 5; 6; 7; 8
PS.SPMJ.2
PS.SPID.5

**Unit 6:  Probability Distribution**

| 6.1 | Random Variables and Probablilty Distributions |
|---|---|

PS.SPMD.1; 2; 3; 4; 5; 6;

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|---|---|---|---|
| | 6.2 | Binomial Probabilities | |
| | 6.3 | Additional Properties of the Binomial Distribution | |

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| **2nd nine weeks** | **Unit 7: Normal Distribution** | | PS.SPID.4; PS.SPMD.1; 3; 6 |
| | 7.1 | Graphs of Normal Probability Distributions | |
| | 7.2 | Standard Units and Areas Under the Standard Normal Distribution | |
| | 7.3 | Areas Under the Normal Curve | |
| | 7.4 | Normal Approximation to the Binomial Distribution | |

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| | **Unit 8: Statistical Research Project** | | PS.SPMJ.3; 5; 6; |

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| | **Unit 9 Introduction to Sampling Distributions** | | PS.SPMJ.1; |
| | 8.1 | Sampling Distributions | |
| | 8.2 | The Central Limit Therorem | |

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| | **Unit 10 Estimation** | | PS.SPMJ.4; |
| | 9.1 | Estimating "mu" with large samples | |
| | 9.2 | Estimating "mu" with small samples | |
| | 9.3 | Estimation "p" in the Binomial Distribution | |
| | 9.4 | Choosing the Sample Size | |

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|---|---|---|---|
| | **Unit 11 Hypothesis Testing** | | PS.SPMJ.1; PS.SPMD.3 |
| | 10.1 | Introduction to Hypothesis Testing | |
| | 10.2 | Test Involving the Mean "mu" (Large Samples) | |
| | 10.3 | The P Value in Hypothesis Testing | |
| | 10.4 | Test Involving the Mean "mu" (Small Samples) | |
| | 10.5 | Tests Involving a Proportion | |