AP Stats

Fall 2025

Mr. Ortegren

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Google Classroom Code(s):

Class Syllabus

AP Course and Exam Description

Dual Credit

Wesleyan Syllabus

Formula Sheet

Other teachers who can help me with this class:

Mrs. Witt - Room 218

Sept 1 Sept 8 Sept 16 Sept 22 Sept 29 Oct 7 Oct 20

Oct 28 Nov 4 Nov 10 Nov 18 Nov 24 Dec 1 Dec 9 Dec 15

Power Essentials and Learning Targets:

Date	Power Essential	Learning Target	In-Class	Assignments	Activities for Success
Thursday August 14	**All Student Assembly**	**All Student Assembly**	**All Student Assembly**	**All Student Assembly**	**All Student Assembly**

Date	Power Essential	Learning Target	In-Class Activities	Assignments	Activities for Success
Monday August 18	Exploring Data: I can describe patterns	• Identify the individuals and variables in a set of data. • Classify variables as categorical or quantitative.	Seating Chart Syllabus Book/Calculator Checkout Learning Targets Pilot Simulation Identify **individuals** and **variables** Classify variables	HW 1.0-Pg 7 (1, 3, 5, 7, 9, 10) Due 8/20 Key	1.0 Slides Student handout 1.0 1.0 Notes 1.0 Video
Wednesday August 20	Exploring Data: I can describe patterns	•Make and interpret bar graphs for categorical data. •Identify what makes some graphs of categorical data misleading. •Calculate marginal and joint relative frequencies from a two-way table. •Calculate conditional relative frequencies from a two-way table. •Use bar graphs to compare distributions of categorical data. •Describe the nature of the association between two categorical variables.	Collect HW 1.0 Analyzing categorical data Displaying categorical data(staplet) Graphs: Good and Bad Analyzing data on Two Categorical Variables Relationships between two categorical variables	HW 1.1-Pg 24 (13, 15, 17, 19, 21, 23,27, 29, 33, 35, 40–43) Due 8/22 Key	1.1 Slides Student handout 1.1 1.1 Notes 1.1 Video
Friday August 22	Exploring Data: I can describe patterns	•Make and interpret dotplots, stemplots, and histograms of quantitative data. •Identify the shape of a distribution from a graph. •Describe the overall pattern (shape, center, and variability) of a distribution and identify any major departures from the pattern (outliers). •Compare distributions of quantitative data using dotplots, stemplots, and histograms.	Collect HW 1.1 Quiz Reminder Display quantitative data Dotplots Describing distributions Comparing distributions Stemplots Histograms	HW 1.2-Pg 47(45, 49, 51, 55,59, 63, 65, 69, 77, 80–85) Due 8/26 Key	1.2 Slides Student hand out 1.2 1.2 Notes 1.2 Video Motivating SOCV

Date	Power Essential	Learning Target	In-Class Activities	Assignments	Activities for Success
Tuesday August 26	Exploring Data: I can describe patterns	•Calculate measures of center (mean, median) for a distribution of quantitative data. •Calculate and interpret measures of variability (range, standard deviation, IQR) for a distribution of quantitative data. •Explain how outliers and skewness affect measures of center and variability. •Identify outliers using the 1.5×IQR rule. •Make and interpret boxplots of quantitative data. •Use boxplots and numerical summaries to compare distributions of quantitative data.	Collect HW 1.2 Describe quantitative data distributions Center: Mean, Median Mean vs Median Applet Variability: Range, Standard Deviation, IQR Identify outliers Boxplots Compare quantitative distributions	HW 1.3-Pg 75 (87, 89, 91, 95, 97, 101, 103, 105, 109, 111, 113, 115, 121, 123–126) Due 8/28 Key	1.3(a) Slides 1.3(b) Slides Student hand out 1.3 1.3 Notes 1.3 Video
Thursday August 28	Review Unit 1	Review Unit 1	Chapter 1 Review	Chapter 1 Review Exercises and Chapter 1 AP Stats Practice Test Key Due 9/2	Chapter 1 Frappy
Monday September 1	**No School - Labor Day**				
Tuesday September 2	CHAPTER 1 TEST	CHAPTER 1 TEST	CHAPTER 1 TEST	CHAPTER 1 TEST	CHAPTER 1 TEST

Date	Power Essential	Learning Target	In-Class Activities	Assignments	Activities for Success
Thursday September 4	Explore Data: I can describe departures from patterns	•Find and interpret the percentile of an individual value within a distribution of data. •Estimate percentiles and individual values using a cumulative relative frequency graph. •Find and interpret the standardized score (z-score) of an individual value within a distribution of data. •Describe the effect of adding, subtracting, multiplying by, or dividing by a constant on the shape, center, and variability of a distribution of data	Learning Targets Percentiles Cumulative relative frequency graph Standardized scores Transforming Data	Hw 2.1-Pg 104 (1, 3, 7, 9, 11, 13, 15, 19, 21, 25, 29, 31, 33–38) Due 9/8 Key	2.1 Slides Student Handout 2.1 2.1 Notes 2.1 Video
Monday September 8	Explore Data: I can describe departures from patterns	•Use a density curve to model distributions of quantitative data. •Identify the relative locations of the mean and median of a distribution from a density curve. •Use the empirical rule to estimate (i) the proportion of values in a specified interval, or (ii) the value that corresponds to a given percentile in a Normal distribution.	Hand back tests Dual Credit Scholarship Collect HW 2.1 Density Curves Describing Density Curves Normal Distributions The Empirical Rule	HW 2.2A-Pg 138 (41, 45, 47, 49, 51) Due 9/10 Key	2.2(a) Slides Student Handout 2.2a 2.2a Notes 2.2 Video

Date	Power Essential	Learning Target	In-Class Activities	Assignments	Activities for Success
Wednesday September 10	Explore Data: I can describe departures from patterns	•Find the proportion of values in a specified interval in a Normal distribution using Table A or technology. •Find the value that corresponds to a given percentile in a Normal distribution using Table A or technology. •Determine whether a distribution of data is approximately Normal from graphical and numerical evidence.	PBIS Collect HW 2.2a Finding Areas in a Normal Distribution Finding Values from Areas Assessing Normality	HW 2.2B-Pg 138(53, 55, 57, 59, 61, 63, 73, 75, 77, 79, 81, 85–90) Due 9/12 Key	2.2(b) Slides Student Handout 2.2b 2.2b Notes 2.2 Video Standard Normal z-table
Friday September 12	Review Unit 2	Review Unit 2	Chapter 2 Review	Chapter 2 Review Exercises and Chapter 2 AP Stats Practice Test Key Due 9/16	Chapter 2 Frappy
Tuesday September 16	UNIT 2 TEST	UNIT 2 TEST	UNIT 2 TEST	UNIT 2 TEST	UNIT 2 TEST

Date	Power Essential	Learning Target	In-Class Activities	Assignments	Activities for Success
Thursday September 18	I can describe departures from patterns	•Distinguish between explanatory and response variables for quantitative data. •Make a scatterplot to display the relationship between two quantitative variables. •Describe the direction, form, and strength of a relationship displayed in a scatterplot and identify unusual features. •Interpret the correlation. •Understand the basic properties of correlation, including how the correlation is influenced by unusual points. •Distinguish correlation from causation.	New seating chart Hand back tests Learning Targets Explanatory and Response Variables Displaying Relationships: Scatterplots Describing a scatterplot Measuring linear association: Correlation Cautions about correlation	HW 3.1-Pg 171 (1, 3, 5, 9, 11, 13, 15, 17, 19, 23, 29–34) Key Due 9/22	3.1 Slides Student Handout 3.1 3.1 Notes 3.1 Video
Monday September 22	I can describe departures from patterns	•Make predictions using regression lines, keeping in mind the dangers of extrapolation. •Calculate and interpret a residual. •Interpret the slope and y intercept of a least-squares regression line. •Determine the equation of a least-squares regression line using technology or computer output. •Construct and interpret residual plots to assess whether a regression model is appropriate.	Collect HW 3.1 Prediction Residuals Interpreting a regression line The least-squares regression line Determining if a linear model is appropriate: Residual Plots	HW 3.2A-Pg 204(37, 39, 41, 43, 45, 47, 49, 51, 53) Key Due 9/24	3.2a Slides Student Handout 3.2A 3.2a Notes 3.2 Video

Date	Power Essential	Learning Target	In-Class Activities	Assignments	Activities for Success
Wednesday September 24	I can describe departures from patterns	•Interpret the standard deviation of the residuals and r^2 and use these values to assess how well a least-squares regression line models the relationship between two variables. •Describe how the least-squares regression line, standard deviation of the residuals, and r^2 are influenced by unusual points. •Find the slope and y intercept of the least-squares regression line from the means and standard deviations of x and y and their correlation	Collect HW 3.2A IQ Predictions How well the line fits the data: The role of s and r^2 in regression Interpreting computer regression output Regression to the mean Correlation and regression wisdom	HW 3.2B-Pg 204(55, 57, 59, 63, 65, 67, 71–78) Key Due 9/29	3.2b Slides Student Handout 3.2B 3.2B Notes 3.2 Video
Friday September 26	**No School - Professional Development Day**				
Monday September 29	I can describe departures from patterns	•Use transformations involving powers, roots, or logarithms to create a linear model that describes the relationship between two quantitative variables, and use the model to make predictions. •Determine which of several models does a better job of describing the relationship between two quantitative variables.	Collect HW 3.2B Transforming with powers and roots Transforming with logarithms: Power models Transforming with logarithms: Exponential models Which transformation should we choose?	HW 3.3-Pg 229(81, 83, 85, 87, 89, 91, 93, 95-96) Key Due 10/1	Student Handout 3.3 3.3 Note Sheet 3.3 Video
Wednesday October 1					
Friday October 3					
Tuesday October 7					
Thursday					

Date	Power Essential	Learning Target	In-Class Activities	Assignments	Activities for Success
October 9					
Monday October 13					
Tuesday October 14	Pre-ACT Testing Day				
Thursday October 16	No School - Teacher Work Day				
Friday October 17	No School - PTC Payback Day				
Monday October 20					
Wednesday October 22					
Friday October 24					
Tuesday October 28					
Thursday October 30					
Friday October 31	No School - Teacher Work Day				
Tuesday November 4					
Thursday November 6					
Monday November 10					
Wednesday					

Date	Power Essential	Learning Target	In-Class Activities	Assignments	Activities for Success
November 12					
Friday November 14					
Tuesday November 18					
Thursday November 20					
Monday November 24					
Wednesday November 26	No School - Thanksgiving Break				
Thursday November 27	No School - Thanksgiving Break				
Friday November 28	No School - Thanksgiving Break				
Monday December 1					
Wednesday December 3					
Friday December 5					
Tuesday December 9					
Thursday December 11					
Monday December 15					
Wednesday					

Date	Power Essential	Learning Target	In-Class Activities	Assignments	Activities for Success
December 17					
Thursday December 18					
Friday December 19					