	Marietta City Schools **2023–2024 District Unit Planner**		
	AP Statistics		
Unit title	**Unit 2: Exploring Two-Variable Data**	**Unit duration (hours)**	**7 Class Blocks**

Mastering Content and Skills through INQUIRY (Establishing the purpose of the Unit): *What will students learn?*

GA DoE Standards

Standards

2.1 Introduction Statistics: Are Variables Related?
2.2 Representing Two Categorical Variables
2.3 Statistics for Two Categorical Variables
2.4 Representing the Relationship Between Two Quantitative Variables
2.5 Correlation
2.6 Linear Regression
2.7 Residuals
2.8 Least Squares Regression
2.9 Analyzing Departures from Linearity

Concepts/Skills to support mastery of standards

- Two-way tables
- Association
- Correlation
- Linear Regression Models
- Residuals
- Least Squares Regression
- Analyzing Departures from Linearity

Vocabulary

Categorical Variable	Quantitative Variable	Association	Scatterplot	Explanatory Variable
Response Variable	Correlation	Regression	Residual	Least-Squares Regression

Essential Questions

Where do I stand?
What are characteristics of a normal distribution?
How are z scores/percentiles useful when comparing different distributions?
How do I tell if a distribution is normal?

Assessment Tasks

List of common formative and summative assessments.

Formative Assessment(s):

Common Formative Assessment – Ticket out the Door, Homework, Group Presentations, Quiz

Summative Assessment(s):

Common Summative Assessment – Unit 2 Test (50% Multiple Choice/50% Free Response)

	Learning Experiences	
Objective or Content	**Learning Experiences**	**Personalized Learning and Differentiation**
2.C Calculate summary statistics, relative positions of points within a distribution, correlation, and predicted response. **4.B** Interpret statistical calculations and findings to assign meaning or assess a claim.	**How many iPhones will be sold? (Stats Medic)** Students will investigate data on iPhone sales to determine the equation of a least-squares regression line using technology or computer output. Students will also construct and interpret residual plots to assess whether a regression model is appropriate.	**Extending the Learning:** Students can extend the data to include iPhone models released since 2015 and run the regression to explore changes in the linear model and their ability to make accurate predictions.
Content Resources		
All notes are provided on schoology. The Practice of Statistics 5th edition AP College Board		