**ARC Week at Glance**

**Subject: Math Course: A.P. Statistics Grade: 11th – 12th Dates: 10/21 – 10/25**

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| **AP Standard ID**: Analyze Bivariate Quantitative Data with Least-squares Regression Lines, Residual plots, Outliers, and Influential Points.  **Assessment(s):  Quiz  Unit Test  MML  Lab  FRQ** | | | | | | |
|  | **Learning Target**  **(I am learning about…)** | **Criteria for Success**  **(I can…)** | **Opening**  *(10 - 15 Mins)* | **Work-Session**  *(20 - 25 mins)* | **Closing**  *(5 - 10 mins)* | **Literacy Tasks/Focus** |
| *(Include at least one/two formatives\*in any part of the lesson as needed)* | | |
| **Monday** | I am learning about residuals. | I can construct residual plots and use them to determine how well the LSRL fits the data | Hurricane Katrina had a central pressure at 920 millibars. What does our regression model predict for her maximum wind speed?  2. How good was that prediction given that Katrina’s actual wind speed was measured at 110 knots?  3. So, what was the residual for this prediction?  4. Did our model overestimate or underestimate the wind speed? | Chapter 7: Linear Regression pages 188 – 191 | Practice Problem #56 on pages 199 (4th Edition Text) | Does your model do a good job of making predictions? Why or why not? |
| **Tuesday** | I am learning about residuals. | I can construct residual plots and use them to determine how well the LSRL fits the data | Just Checking pg 186 | Chapter 7: Linear Regression R-Squared and More on Residuals | MML 7.1 | What does R-Squared mean? What does r mean? Compare & contrast. |
| **Wednesday** | All Above | I can analyze bivariate quantitative data with Least-Squares Regression Lines, residual plots | FRQ #5 from **2011**  and model exemplars | FRQ #5 from **2015** in small groups | MML 7.1 | Justify responses, in context! |
| **Thursday** | I am learning about using Least-Squares Regression Lines to make predictions | I can use LSRL’s to model associations between bivariate quantitative data and use it to make predictions | Display Do’s and Do Nots from FRQ’s | **Practice & Review for Chapter 7: Linear Regression**  **\*Formative** | #58 | What does the computer output and bivariate analysis tell you about the model? |
| **Friday** | I am learning about using Least-Squares Regression Lines to make predictions | I can use LSRL’s to model associations between bivariate quantitative data and use it to make predictions | Display Do’s and Do Nots from #58 | **Quiz on Chapter 7: Linear Regression**  **\*Summative** |  | Does your model do a nice job of predicting outcomes? Why or why not? |

**\*** Exit Ticket/Final Stretch Check  Electronic Tools  Dry Erase Boards – quick checks  Turn & Talk Discussion (verbal responses)  Teacher Observation – document Clipboard

Quick Write/Draw  Annotation  Extended Writing  Socratic Seminar  Jigsaw  Thinking Maps  Worked Examples  Other : \_\_\_\_\_\_\_\_\_\_\_