All handouts for this class: **https://tinyurl.com/IST772crowston**

IST772 Linear Multiple Regression (Week 8)

Pre-class activity:

- Grab a copy of Week8OLStest.xlsx from the handouts area
- Adjust the slope with the buttons to see the effects on the sum of squared errors of prediction

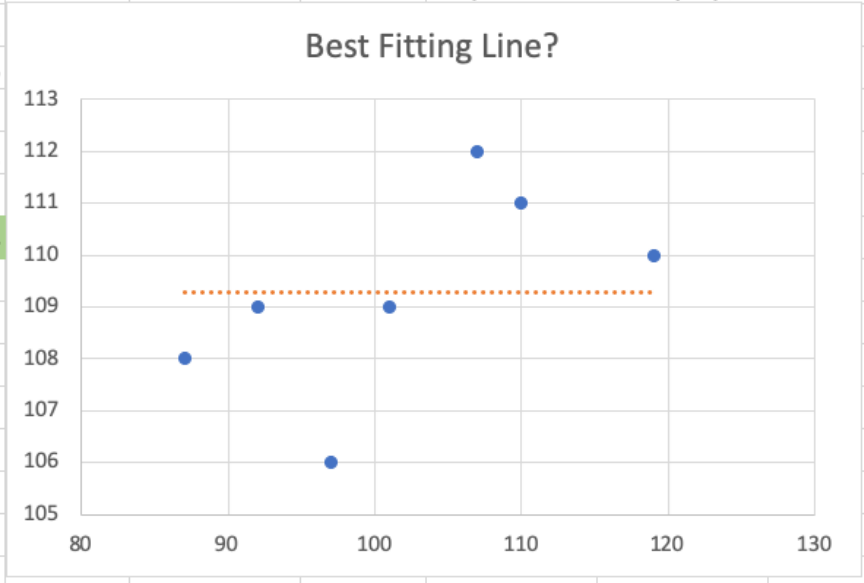
OLS Demonstration

X	Y	Pred Y	SqErr
107	112	109.285714	7.36734694
97	106	109.285714	10.7959184
92	109	109.285714	0.08163265
87	108	109.285714	1.65306122
119	110	109.285714	0.51020408
101	109	109.285714	0.08163265
110	111	109.285714	2.93877551
		Sum SqErr:	23.4285714
			(Minimize!)

Change Slope (b)

Also available at: http://tinyurl.com/777olsSlope

r=	0.599	Pearson's Product Moment Correlation
a=	109.286	Automatically calculated from means
b=	0.000	Slope controlled by up/down buttons



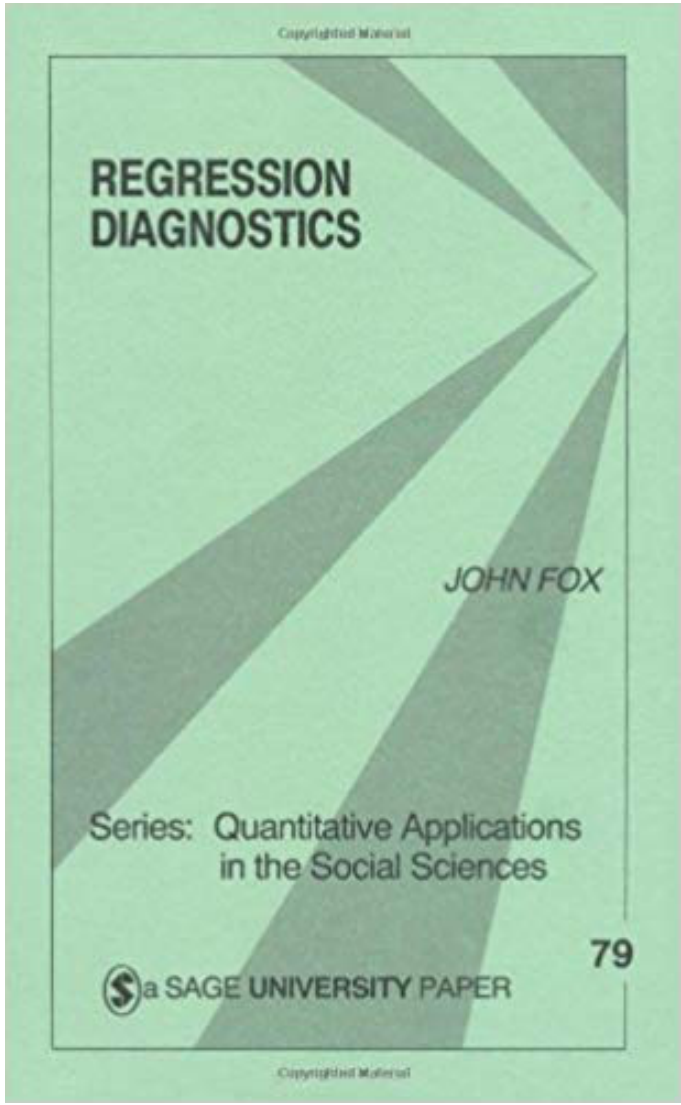
Breakout – Run Regression Models (3 phases)

- Read in the cancer Data
- Explore variables for outliers, skewness
- Run and interpret regression models
- Share your code on https://codeshare.io/aJDyRX

All handouts for this class: **https://tinyurl.com/IST772crowston**

Paper (Booklet) of the Week – Fox 1991

- One of a great series by Sage: The little green books
- Discusses the most important regression diagnostics, how to do them, and how to interpret them
- Free full text online for SU students: **https://tinyurl.com/johnfoxbook**



Homework

- The homework for week 8 is based on exercises 1-8 on pages 181-182 but with changes as noted in the notebook.
- First practice exam for the final (third one for the course) will be posted in the handouts sharing area shortly
- I will post a key for the practice exam on Friday; if you have any questions, are unsure about the key, or would like feedback on your practice exam, you can optionally submit it to the LMS