Instructor: Mrs. Dee Krolikowski  
Phone: 308-384-8310  
Email: dkrolikowski@gips.org  
Doane Email: dee.krolikowski@doane.edu  
My Web Page: https://sites.google.com/a/gips.org/krols-calcs/

**Catalog description of course:** An introductory course in statistical procedures with applications to business. Topics include descriptive statistics, the binomial and normal distributions, sampling, hypothesis testing, estimation, correlations, contingency tables, analysis of variance and linear regression with bivariate data, and probability: combinations, permutations, basic counting principal, and odds.

**Objectives:**
1. Define descriptive statistics and concepts of statistical analysis. Define and give examples of various data types.
2. Organize data graphically. Summarize data using measures of central tendency (mean, median, mode, midrange).
3. Calculate the measures of dispersion (standard deviation, variance).
4. Apply the rules of probability and the binomial distribution.
5. Evaluate and convert data to the standard normal score (z-score) for comparison purposes.
6. Interpret linear correlation and linear regression.

**Text:** **NO TEXT REQUIRED.** Some problems are from the following text:  

**TI 83 Graphing Calculator** will be used and checked out from instructor and checked back in on the last day of class.

**Course Requirements:**
4 Exams (100 points each)  
3 labs (20 points each)  
Assignments (90 points)  
Semester Review Packet (50 points)  
Total points: 600

**Practices concerning Americans with Disabilities, Student Code of conduct and Academic Integrity** will follow those outlined in the Doane catalog and student handbook.
Doane College Academic Integrity Policy:
The Doane College Academic Integrity Policy will be adhered to in this class. All
projects and tests will represent your own work. Any use of others’ ideas and
words without proper citation of sources is plagiarism and will result in penalties
to be determined by the instructor and/or the dean of undergraduate studies.

Cooperative Learning is a must. Students must be able and willing to work with
a team or partner on labs, assignments and tests. Time will be allowed in class to
accomplish labs and most of the assignments. Students are expected to be
respectful, courteous and cooperative.

Attendance is strongly recommended but if a class were missed, getting the
assignment ahead of time would be better than afterwards. Students must email
me if you miss a class. A small deduction on your assignment points will be
made with an absence or tardy.

Dates:                      Lessons and activities:
March 12, 2015             Intro/terminology, Reaction time lab, Ch. 1 Review
March 19, 2015             Ch. 1 Test, Measures of center and spread,
                          Interpreting different types of graphs, standard
                          score (z-score), Mid-Ch. 2 Review
March 26, 2015             Mid Ch. 2 Test, Random Rectangles Lab,
                          Measures of dispersion, variance, standard
distinction, Measures of Position, Frequency
distributions
April 2, 2015              Binomial Distributions, Bivariate Data, Linear
                          Correlation, Linear Regression, Correlation
                          Coefficient, Scatterplots, Line-of-best-fit
April 9, 2015              Rolling Rivers Lab, Rules of Probability, Odds,
                          Permutations, Combinations, Basic Counting
                          Principle, Venn Diagrams
April 16, 2015             Mutually Exclusive, Independent vs. Dependent
                          Variables, Ch. 4 Review
April 23, 2015             Ch. 4 Test, The Standard Normal Distribution,
                          Applications of the normal distribution, Ch.
                          6 Review, Semester Review
April 30, 2015             Ch. 6 Test, Hand in Semester Review and/or any
                          missing work, check grade, and hand in calculator
                          meet only if one of the above dates is cancelled
May 7, 2015                
Grading Scale:
540-600 total points       A
480-539 total points       B
420-479 total points       C
360-419 total points       D
Below 360                  F