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**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, and one-way analysis of variance and linear regression.

**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. Calculate confidence intervals.
7. Interpret linear correlation and linear regression.


**Course Requirements:**
- 4 Exams (100 points each)  
- 3 labs (20 points each)  
- Homework (128 points)  
- Semester Review Packet (50 points)  
- total points: 638

TI 83 Graphing Calculator very helpful, but not required

**Practices** concerning Americans with Disabilities, Student Code of conduct and Academic Integrity will follow those outlined in the Doane catalog and student handbook.
Cooperative Learning is a must. Students must be able and willing to work with a team or partner on labs and assignments. 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 is missed, getting the assignment ahead of time would be better than afterwards. Students must email me if you miss a class.

Dates: 

<table>
<thead>
<tr>
<th>Date</th>
<th>Exam or Lab</th>
<th>Material to Cover</th>
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<tbody>
<tr>
<td>January 14, 2013</td>
<td>Reaction time lab</td>
<td>Intro/terminology</td>
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<tr>
<td>January 21, 2013</td>
<td>Random Rectangles</td>
<td>Measures of center and spread, interpreting different types of graphs, standard score (z-score), normal distributions, standard deviation</td>
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<tr>
<td>January 28, 2013</td>
<td>Ch. 2 Test</td>
<td>Bivariate Data, Linear Correlation, Linear Regression</td>
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<td>Helicopters Lab</td>
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<tr>
<td>February 4, 2013</td>
<td>Ch. 3 Test</td>
<td>Rules of Probability, Binomial Distributions</td>
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<td>February 11, 2013</td>
<td>Ch. 4 Test</td>
<td>The Standard Normal Distribution</td>
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<tr>
<td>February 18, 2013</td>
<td>Ch. 5 Test</td>
<td>Applications of normal distributions and confidence intervals</td>
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<tr>
<td>February 25, 2013</td>
<td>Ch. 6 Test</td>
<td>Semester Review</td>
</tr>
<tr>
<td>March 4, 2013</td>
<td>Ch. 7 Test</td>
<td>Hand in Sem. Review, See grade Optional Retakes</td>
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</tbody>
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Grading Scale:

- 574-638 total points: A
- 458-573 total points: B
- 320-457 total points: C
- 191-319 total points: D
- Below 191: F