Classes: Monday, Wednesday, & Friday 9:45 - 10:50 AM

Instructor: David M Kender  E-Mail: dkender@wright.edu

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Office Hours: As posted and by appointment.

Web Page: www.cs.wright.edu/~dkender

Course Description: Application of statistical analysis techniques including, probability distributions, sampling theory, design of experiments, hypothesis testing and statistical inference, correlation and regression, analysis of variance, process improvement tools, SPC, and computer-assisted data analysis and statistical inference analysis.

Course Objectives: Students will be able to design an experiment and interpret and analyze relevant data using statistical inference methods including hypothesis testing, regression analysis, contingency tables, analysis of variance, statistical process control and surface response methods, using a computer program analysis tool (SAS JMP-In).

Course Requirements and Evaluation: Students are expected to attend and participate in all scheduled classes. Course grades will be based on several criteria including a subjective evaluation of effort, learning, and understanding.


Homework: Ungraded homework will be assigned throughout the quarter. Students are encouraged to work collaboratively and to seek help from the instructor as needed. Previously assigned homework will be used as a basis for classroom quizzes.

JMP-In Exercises: A series of computer exercises are to be accomplished using the JMP-In analysis software. The exercises consist of interpreting, analyzing, evaluating, reporting on data related to an engineering scenario. Statistical analysis using the JMP-In software package is an important element of the course. In general, students may work as a team (two students per team) using a data set provided by the instructor.

Quizzes: Unannounced quizzes will be used at the instructor’s discretion. No makeup quizzes will be available. Students who are absent from class will receive zero points for that quiz. Quizzes will normally cover the concepts previously discussed in class and/or the ideas that were emphasized in the homework and exercises.

Tests: A mid-term and final exam are scheduled. The tests will be closed-book; however, students are permitted and encouraged to use two pages of student generated notes as well as their calculators. Portions of each test may include JMP-In related material that will be accomplished out-of-class.

Graduate Project: Graduates students are to select a mini-project, please refer to Statistics Mini-Project Topics.

Academic Integrity: The instructor fully endorses the Wright State University policy to uphold and support standards of personal honesty and integrity for all students consistent with the goals of a community of scholars and students seeking knowledge and truth.

Reasonable Accommodations Policy: Any student with a disability that may prevent them from fully demonstrating their abilities should contact me personally as well as the Office of Disability Services as soon as possible so we can discuss accommodations necessary to ensure full participation and facilitate your educational opportunities.

Grading Criteria: Grades will be awarded as follows.

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<thead>
<tr>
<th>Element</th>
<th>Comments</th>
<th>Proportional Value</th>
<th>Grades</th>
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<tbody>
<tr>
<td>Homework</td>
<td>Assigned but not graded</td>
<td>92 - 100%</td>
<td>A</td>
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<tr>
<td>Quizzes &amp; JMP-In Exercises</td>
<td>Points vary</td>
<td>10%</td>
<td>B</td>
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<tr>
<td>Project</td>
<td>One</td>
<td>10%</td>
<td>C</td>
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<tr>
<td>Tests</td>
<td>Two</td>
<td>80% (40% each)</td>
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<td></td>
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<td>&lt; 70%</td>
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