Project Overview – Your project assignment is to design and implement a design of experiments statistical analysis for a real world problem that you will select. The expectation is that this experiment will include the task of collecting data, and then performing analysis to determine the best available way to run the process. You may use data collected for projects in other courses, only with the written approval of the instructors for both courses. An important part of the learning process is designing a system to collect data and then performing the actual collection. For this reason, use of publically available historical data is discouraged, if this type of data is utilized in the project, then the level of analysis expected will be commensurately higher, due to the reduction in collection efforts.

As noted in the course syllabus, 15% of your course grade will be based on the project. At the end of the semester, you are required to present your project in class and submit a formal project report. The report is required to use APA format (example posted on course website) with table and figures embedded within the manuscript.

Project Objectives
- Apply statistical design of experiment and modeling techniques in order to gain an understanding of how to apply concepts learned in the course to a non-textbook setting.
- Gain experience with the problems associated with collecting data.
- Gain experience making a formal presentation while working with a group.

Project Teams
You are responsible for building your own teams of 2 – 4 people (3 – 4 recommended) and submitting the team composition to wschell@ie.montana.edu by 2 March 12:00 noon. Any class members not on a team by this time will be assigned to a team by the instructor.

Project Proposal – Due 9 March by 12:00 noon to wschell@ie.montana.edu
- One page summary
- Must clearly identify the problem that is being solved or opportunity that will be better understood through completion of the project.
- Define the data collection plan and corresponding initial design for the experiment or model to be built.
- State a list of tasks that will be undertaken to complete the project.
- Identify the roles (with timelines) that each member of the group will hold.

Final Deliverables
- Class presentation – 15 - 20 minutes + Q&A – 16, 18, or 20 April. Presentation will go in order of team number (set by order of arrival) unless otherwise arranged by agreement with another team.
- Final report – 23 April in class. 5 – 10 pages not including cover page or appendices. 1” margins with 1.5 line spacing.