

## GBA 334 Group Project Guidelines

### Instructions:

The Decision Models term project is fairly flexible in terms of the types of projects that are acceptable. You may come up with your own project topic or choose from the list of topics below. In either case, the project topic must be approved by the professor. Each group is expected to prepare a full report that addresses all areas noted below. At the discretion of the instructor, this may include (a) make a short PowerPoint or Prezi presentation to the class reporting on their project (18 minutes including Q&A), or (b) writing a paper. Either way that is chosen, each group must submit files containing all of the project-related materials (e.g., Excel files, PowerPoint presentation files, Word files, etc.). Sample topics include:

- Conduct an analysis of a **real** decision problem (personal or managerial) that you are familiar with.
- An analysis of an important decision problem (again, **real**) "in the public domain".
- An experiment involving decision making and decision-analytic tools.

**Group Selection:** Students will form into groups of 4 or 5 and notify the instructor via course e-mail the names of the group members **no later than Sunday 11:59 PM EST/EDT of Module 2**.

**Proposal:** Submit a Research Proposal for instructor approval that includes your main variables, any control variables, how they are labeled, what your value ranges are, your specific data source, and your tentative research question. Submit the research proposal to your assigned group's Dropbox basket **no later than Sunday 11:59 PM EST/EDT of Module 4**. (These Dropbox baskets are linked to Turnitin.)

**Final Report:** As mentioned earlier, this project can be a written report, a PowerPoint or Prezi presentation, or a combination of the three. Regardless of the form the presentation takes, it *must include the following areas*:

- Introduction – What was your project? Why did you choose the topic? What was the main research question? How did completing this project demonstrate Saint Leo University's core value of excellence?
- Data – What was your data source? What dates did it cover? What was the web site you obtained it from? What variables did you include? Identify all dependent and independent variables. What were their values and what do those values signify?
- Descriptive Statistics – for your primary variables, be sure to include Table 1 below (you can cut and paste it into your document if you like).
- Graphs as appropriate – scatterplot, histogram, pie chart, etc.
- Testing Conducted – what type of test did you conduct? What were the results?
- Conclusion – Wrap up your report in a concise manner. Clearly state what you learned from the results and any potential shortcomings of your analysis.

**Table 1 – Descriptive Statistics for ?????**

Add descriptive statistics measures as needed for your project.

<i>Statistic</i>	<i>?????</i>	<i>?????</i>
N	?	?
Mean	?	?
Std. Deviation	?	?
Skewness	?	?
Minimum	?	?
Q1	?	?
Median	?	?
Q3	?	?
Maximum	?	?

Each team member must submit the Final Report to **Chalk and Wire** using the link in the Module 7 folder **no later than Sunday 11:59 PM EST/EDT of Module 7**. (Chalk and Wire is linked to Turnitin.) Students who do not submit the assignment to Chalk and Wire will receive a zero for the assignment. This is a key program assessment; the results are used to ensure students are meeting program goals. Video and {DF instructions can be found on the course home page. PDF instructions are also located in the Start Here folder.

**Possible Project Ideas:**

- How does gas mileage depend on the [blank] of the vehicle? [Blank] could be weight, engine size, seating capacity, size (e.g. compact, sub-compact, SUV), etc. There should be multiple predictor variables included.
- How does the gender distribution of grocery store customers depend on [blank]? Here, [blank] could be the day of the week, the time of day, the location of the store, etc.
- Is there a relationship between [physical measurement] and [sports performance]. The [physical measurement] could be hand span, length of inseam, length of foot, etc. The [sports performance] could be free throw percentage, time for 50m sprint, etc.
- Does [measurement] depend on the area of town? The [measurement] could be the average street width, the distance between fire hydrants, the width of the yard between the curb and the sidewalk, etc.
- Can [statistic] predict [outcome]? Statistic can be virtually any published statistic for any professional or amateur sport. Outcome can be wins, playoff appearances, title game appearance, championships, etc.
- Are [locations] adequately staffed during peak hours? Using queuing theory, determine if movie theaters, restaurants, etc. are staffed appropriately.
- Does [nutritional content] or other predictor measure(s) of a cereal affect its price?