**IS101Y/CMSC101, Fall 2013**

**Data Analysis and Presentation Assignment
Draft due October 25, 2013 Final due October 31, 2013**

Your task for this assignment is to use MS Office tools (in particular Excel and PowerPoint) to analyze and present data about time management behaviors among students. Your intended audience is high school seniors about to enter UMBC (OK, so they won't actually be there, but you should tailor your presentation to be appropriate for them). Your goal is to brief them on the effects of choices they will make about how they spend their time, in order to give advice about how to survive and thrive at UMBC, using data to support your points. Present the supporting data in a visual form (i.e., charts and graphs). This is a group assignment. You will complete it with your team, with each team member contributing to the result. Each team will turn in one joint document and give a joint presentation in class on October 31. In addition, each individual team member will turn in a short reflection. A draft of your presentation is due October 25. You will receive feedback on the draft about presentation choices, content, analysis, and style.

**The Data**

We’ve provided a spreadsheet of (fictitious) data collected from a set of UMBC freshmen about the choices they make about how they spend their time, and the resulting outcomes. The choices and outcomes are the same as those in the Semester Game (the subject of your team project). Each row in the spreadsheet has 15 rows for each student, showing the choices and outcomes for that student for that week.

**The Questions**

Each team will construct a presentation about two of the time choices and their effect on the three outcomes. Each team will draw their assigned two time choices randomly in class. Your job is to examine the available data and present it in a set of informative graphs and text.

For each of your assigned time choices, create one or more charts in Excel that answers each of the questions below:

1. What is the overall picture of the data?
	1. Where are most of the values?
	2. What are the lowest and highest values?
	3. How do the values change over the 15 weeks?
2. What is the relationship between the time choice and each of the three outcomes (happiness and grade potential, and wealth)?
	1. If the value of the time choice increases, does the outcome generally increase? Decrease? No clear trend?
	2. Does this relationship change if you look at weekly values vs. averages for each student vs. averages for each week?
3. What can you say about the outliers?
	1. Pick a few points that don’t conform to the trends you identified in question 2. How would you explain why those points are so different (hint: you might have to look at some of the other time choices)?

**The Presentation**

Each team will create and deliver a seven minute presentation of their analysis to the class. Your presentation should include slides that show all the charts you created to answer the questions, along with text that explains and interprets what the charts say. The last part of the presentation should discuss your answer to the following question (in text and pictures):

* Based on the analysis that you’ve done, what would you recommend to the new students about the decisions they’ll make concerning the time choices you’ve analyzed? Be sure that any advice you give is clearly based on the data and the analysis you’ve done.

At least one of your slides must use PowerPoint animation, and at least one must contain a graphic (picture, photo, etc.) that is not from your Excel file. Each member of the group should present at least one slide. We will strictly enforce the seven minute time limit.

**The Reflection**

Each individual team member must write and submit a short reflection paper (maximum one page) that answers the following questions:

1. What did your team change between your draft presentation and the final version?
2. What was the process your team used to prepare your presentation?
3. What was your role in completing this team assignment?

**Resources**

The link below leads to a good series of Excel YouTube Tutorials. I especially recommend (for this assignment) videos #4 and 9-11. But start with the first few videos if you are unfamiliar with Excel:

<http://www.youtube.com/watch?v=8L1OVkw2ZQ8&list=PL766858637FEA80BE>

This next link is a basic tutorial on PowerPoint from the same folks who did the Excel video series:

<http://www.youtube.com/watch?v=sbeyPahs-ng>

**What to turn in**

**Team submission (ONE team member submits the following):**

* Submit your PowerPoint and Excel files using Blackboard. Name the files groupname\_datapresent.ppt (or .pptx) and groupname\_datapresent.xls (or .xlsx).
* Go to Blackboard and click on Course Documents
* Find the Data Analysis Assignment and choose Submit to upload your project. Be sure to use attach the files, rather than just including them in the text window.

Individual submission (EVERY team member submits the following):

* Name your one-page reflection lastname\_reflection, with whatever extension (.doc, .rtf, .pdf, .txt) is appropriate.
* At the same link in Course Documents, upload your reflection.