# **DAT 520 Problem Set 7 Sensitivity Analysis Case Study**

Now that you have reviewed how to do sensitivity in Excel, please update the Sensitivity Analysis Example spreadsheet by reviewing the scenario and answering the questions outlined in this document. The values under the Assumptions field can NOT be static. Please use the formulas within each cell.

## Scenario

You are hired as a consultant for the University of Awesome (UA); the Chief Finance Officer (CFO) would like a sensitivity analysis conducted so that UA can try to capture the BEST number of students based upon revenue. UA has an enrollment (this is what UA SOLD) of 800,000 students. The price per course is $1500. The university has a campus even though it is an online university, and this costs $50,000,000. The cost per student is $250, while payroll costs are $20,000,000.

## Directions

1. Update the Sensitivity Analysis Example spreadsheet’s Assumptions field based on the scenario above. Add your name to cell B1. Paste a screenshot below.

[Insert screenshot]

Produce the following values within the spreadsheet in cell A21, and type your last name and section number in cell B21. Take a screenshot of the completed values.

1. What is the Revenue of UA?

[Insert text]

1. What is the Cost of enrolling students at UA?

[Insert text]

1. What is the Gross Profit at UA?

[Insert text]

1. What are the Other Costs at UA?

[Insert text]

1. What is the Operating Profit at UA?

[Insert text]

[Insert screenshot with completed values]

The CFO is also looking for a what-if sensitivity analysis. UA is thinking about changing the price of a course. The CFO would like a data table constructed with the following prices: $1,000; $1,250; $1,500; $1,750; $2,000; $2,250. As price changes, so does enrollment. The CFO advised you to use the following ranges on enrollment: 600,000; 700,000; 800,000; 900,000; 1,000,000.

1. Construct a data table from the information above.
2. Produce a what-if analysis, using the data table feature. Place your favorite food item in cell G4.

[Insert screenshot of what-if analysis]

1. As tuition is lowered, the CFO is thinking that enrollment will increase. If the CFO lowers tuition to $1,250 and 900,000 students enroll, what is the profit?

[Insert text]

1. The CFO found an error in the cost per student; it is actually $500. In order to make the same profit at the cost per student of $250, what would the CFO need to raise the price per course to?

[Insert text]