

## **MIS 0855 – Data Science (Section 005) – Fall 2016**

### **Exam #3 Guide**

#### **Week 09 – Key Performance Indicators**

- Criteria for good KPI – S.M.A.R.T
- Why KPIs should be SMART
- Manipulation of performance indicators by hospitals or airlines

#### **In-Class Exercise – Week 09 – Visualizing KPIs**

- How to visualize the departure delay KPI in Tableau
- How to create a heatmap in Tableau

#### **Assignment #4 – Cleaning a Dataset (and In-Class Exercise – Week 08)**

- How to use MATCH function in Excel

#### **Week 11 – Predictive Analytics**

- Examples of predictive analytics
- Collaborative filtering
- Measuring customer value with R.F.M.
- Three types of predictive analytics
- Association detection
- Regression
- Decision tree

#### **In-Class Exercise – Week 11 – Simple Predictive Analytics**

- Prediction interval (or confident interval)
- How to conduct an association analysis (association detection) in Tableau
- Outer join – how we joined VadelayOrders records

#### **In-Class Exercise – Week 12 – Integrating Data**

- How to use VLOOKUP function in Excel
- How to use CONCATENATE function in Excel
- How to create a trend line in Tableau

#### **Week 13 – Data Science and Your Career**

- The causes of jobless recovery
- Beveridge curve
- The impact of technology development on employment