Read class slides, reading assignments, in-class exercises, and Assignment #4. Take a look at videos posted on the class site.

Day 20-21 – Key Performance Indicators
- Criteria for good KPI – S.M.A.R.T
- Why KPIs should be SMART
- Manipulation of performance indicators
- How to visualize departure delay KPI in Tableau
- How to create heatmaps in Tableau

Day 22 – Creating Dashboards
- How to use VLOOKUP function in Excel

Day 23 – Integrating Data
- How to use CONCATENATE function in Excel
- How to create a trend line in Tableau

Day 24-25 – Aggregating Data
- Hierarchy in Tableau
- Drill-up and drill-down

Assignment #4 – Cleaning a Dataset
- How to use MATCH function in Excel
- How to detect outliers in Excel

Day 27-28 – Designing Data
- Entity, Attributes, Instances
- Entity Identifier
- Three relationship types – one-to-one, one-to-many, and many-to-many
- How to draw ERD
- Database normalization
- Day 28 in-class exercise
Day 30 – Beyond Numbers
- The examples of structured and unstructured data
- The purpose of sentiment analysis

Day 31-32 – Predictive Analytics
- Examples of predictive analytics
- Collaborative filtering
- Customer value, R.F.M.
- Three types of predictive analytics
- Association detection
- Regression
- Decision tree
- Prediction interval (or confident interval)
- How to do association detection in Tableau

Day 33-34 – Data Science and Your Career
- The causes of jobless recovery
- Beveridge curve
- The impact of technology development on employment