

Course Code            Course Title  
**COMP 1942**            **Exploring and Visualizing Data**

### Course Description

This course teaches concepts and tools for exploring and visualizing data. There are a lot of real-life decision-making problems (e.g., business, logistics, economics, marketing, finance, resource management, forecasting and engineering) which can be formulated using some existing data analysis models. Existing computer science tools such as Microsoft Excel can help us to model and solve these problems easily, and to visualize the solutions. Exclusion(s): COMP 4331, ISOM 3360, RMBI 4310

### List of Topics

1. Association
2. Clustering
3. Classification
4. Data Warehouse
5. Dimension Reduction
6. Web Databases

### Textbook

- Galit Shmueli, Peter C. Bruce and Nitin R. Patel, Data Mining for Business Analytics: Concepts, Techniques and Application with XLminer John Wiley (3rd edition)

### Reference book/ Materials

- Jiawei Han, Jian Pei and Hanghang Tong  
Data Mining: Concepts and Techniques.  
Morgan Kaufmann Publishers (4th edition)
- Pang-Ning Tan, Michael Steinbach, Vipin Kumar  
Introduction to Data Mining.  
Boston : Pearson Addison Wesley (2nd edition)

### Grading Scheme

Assignment	10%
Project	20%
In-class Participation	10%
Mid-Term Exam	20%
Final Exam	40%
Total	100%

### Course Intended Learning Outcomes

1. Identify and explain a variety of data analytic models
2. Apply appropriate data analytic models to formulate, analyze and solve problems
3. Present results in a layman form

### Assess Rubrics

N/A