COMP 4710 – Introduction to Data Mining

Calendar Description: Introduction to data mining concepts and their applications.
Prerequisite: COMP 3380 or consent of department.

Outline

1) Review: Database concepts and usage (1 week)
2) Discovery of frequent patterns (2 weeks)
3) Formation of interesting rules (2 weeks)
4) Analysis of sequential data and time series (2 weeks)
5) Clustering and unsupervised learning (2 weeks)
6) Classification and supervised learning (2 weeks)
7) Detection of anomalies (2 weeks)
8) Other topics (if time permits):
   Incremental mining; mining of data streams; mining of uncertain data; data visualization and visual analytics; real-life applications of data mining; brief introduction to distributed data mining, parallel data mining, and machine learning

Tan et al., *Introduction to Data Mining*, Addison-Wesley, 2006