CISC 4631 Data Mining  
Spring 2015

Session I: Tuesday/Friday 10:00 a.m. – 11:15 a.m. Lecture @ JMH342  
Session II: Wednesday 11:30 a.m. – 2:00 p.m. Lecture @ JMH342

Description: This course covers methods, algorithms, and applications of data mining. Topics include: introduction of data mining, data processing; data mining algorithms and techniques (e.g. associative rules, clustering and classification); Applications are drawn from a variety of areas including information retrieval, market analysis, e-commerce, financial computing, economic forecasting, bioinformatics. 3.00 Credit Hours. After leaning this course, the students should develop an understanding and familiarity with data analysis and data mining algorithms, know under which circumstances they are applicable, and be able to apply them to solve real-world problems.

Instructor: Dr. Yanjun Li (Office JMH402B) yli@fordham.edu.  
Office Hours: Tuesday/Friday 11:15 a.m. – 12:00 p.m., Tuesday 2:15 p.m. – 3:30 p.m., and Wednesday 10:00 a.m. – 11:15 a.m. (other times by appointment).

Textbook: Data Mining: Concepts and Techniques, by Jiawei Han, Micheline Kamber, 2nd Edition

Grading: There will be no exam during the course. Homework assignments are an important part of the class and should be completed on time. Readings are also expected to be completed on time and class participation is an important component of this class. A final project, selected by each student (or team of several students), in conjunction with the instructor, will be a key component of your final grade. Each student/team will present the results for their project toward the end of the class. The percentages given below are guidelines and minor modifications may be made as needed to reflect circumstances in the course.

Attendance/Class Participation: 5%, Homework: 60%, Final Project: 35%.

Academic Honesty: All work produced in this course should be your own unless specifically allowed. Violations of this policy will be handled in accordance with university policy which can include automatic failure of the assignment and/or failure of the course. In situations where collaboration is permitted or required you should be careful to cite any individual who provided assistance and is not already credited on the work.

Course Topics:

1. Introduction to Data Mining
2. Data Processing and Feature Selection
3. Association Analysis
4. Cluster Analysis
5. Classification:
6. Data Mining Applications
7. Advanced Topics: Text Mining/Retrieval, Web Mining, etc.