Course Number: 3460:676  
Course Name: Data Mining  
Course Credits: 3.0  
Schedule:  

Syllabus Date: Fall, 2004  
Prepared By: C.-C. Chan  

Prerequisites: 3460:475/575 or permission of instructor  


Bulletin Description:  
Study fundamental data mining algorithms and their applications in the process of Knowledge Discovery from Databases. Study data warehousing systems and architectures.  

Detailed Description:  

Course Goals:  
1. Study the process of Knowledge Discovery from Databases.  
2. Study fundamental data mining algorithms such as association rules, classification, and clustering algorithms.  
3. Study data cube and OLAP.  
4. Study data integration architectures: federated database, data warehouse, and mediated-based systems.  

Topics:  
1. Overview of KDD and Data Mining  
2. Data Warehouse and OLAP Systems  
3. Data Cubes, MS SQL Server.  
4. Issues and Techniques in Data Preprocessing  
5. Mining Classification Rules  
6. Mining Association Rules in Large Databases  
7. Cluster Analysis  
8. Mining sequential patterns  
9. Data Integration  

Computer Usage:  
There will be team programming projects. Programs will be developed and run on PC or Linux workstations.  

References:  
• www.kdnuggets.com