Submitted by: Ron Zacharski

Department/Discipline(s) and Course Number(s): Computer Science CPSC419

Course Title: Data Mining

Type of change (check all applicable):

Number* _____ Title_____ Credits_____ Description X Prerequisites X Deletion_____ Cross list**____

*This course number must be approved by the Office of the Registrar before the proposal is submitted.

**To cross list courses between departments/colleges, there should be two cover sheets submitted with the proposal — one by the chair of each department with signatures from the relevant College Curriculum Committee Chair.

Effective Date: FALL Semester, Year _____2015__________________________

Current Catalog Entry

419 - Data Mining (3)
Prerequisites: CPSC 220. Practical knowledge of data mining and information retrieval. Students will examine the theoretical foundations of a variety of techniques, gain experience with these techniques using open source software, and learn how to apply them to real-world problems. Topics include decision trees, Naive Bayes, Probabilistic retrieval models, clustering, support vector machines and approaches to web mining.

Proposed Catalog Entry

419 - Data Mining (3)
Prerequisites: CPSC 219 or CPSC 220. Practical knowledge of data mining, machine learning and information retrieval. Students will examine the theoretical foundations of a variety of techniques, gain experience with these techniques using open source software, and learn how to apply them to real-world problems. Topics include decision trees, Naive Bayes, probabilistic retrieval models, clustering, support vector machines, approaches to web mining, and scalable machine learning applications.
**JUSTIFICATION** (including impact on majors, minors, concentrations, and general education courses within the University curriculum; attach additional pages if required)

CPSC219, Foundations for Data Science, is a new class with no prerequisites. Students completing that course will have the necessary prerequisite skills for CPSC419. Currently, the prerequisite for CPSC419 is CPSC220. We would like to add CPSC219 as an alternative (so, CPSC219 OR CPSC220).

Additionally we propose a modification to the catalog description to correct a typo (probabilistic should not be capitalized) and to provide better detail about topics covered in the course.

**TRANSITION PLAN** (describe how will students who are in Catalogs where the course is required for a major be accommodated; attach additional pages if required)

This change does not affect people who are in catalogs where the course is an elective for the major.

**Approvals**

Jennifer Polack  
Department Chair  
Date: ____________________

Dawn S. Bowen  
College Curriculum Chair  
Date: ____________________

Expedited course changes are posted for a 10-class day comment period. If no comments are raised during that time, the proposal becomes final. All expedited proposals approved in this way will be noted on the UCC web site.

If comments are raised, the proposal may be reviewed by the UCC and then approved or it may be returned to the CCC for additional deliberation (as required).