Course Outcomes Guide (COG)

Course Title: MAT 207 – Discrete Mathematics   **Date:** September 2011

Course Team: Jennifer Szczesniak

Expected Learning Outcomes

1. Write a correct proof, including proof by induction.
2. Solve counting problems using combinatorial techniques.
3. Understand the relationship between a statement and its converse, inverse, and contra-positive, including how to correctly negate statements.
4. Perform set operations, including intersection, union, and finding the complement.
5. Demonstrate an understanding of the fundamental concepts of graph theory including but not limited to graphs, digraphs, trees, finding paths and cycles, weighted graphs and graph coloring.

Assessment (How do or will students demonstrate achievement of each outcome? Please attach a copy of your assessment electronically.)

- There are several common questions that are included on the final exams for each section.

Validation (What methods have you used or will you use to validate your assessment?)

- I am not sure how to validate the assessment tools.

Results (What do your assessment data show? If you have not yet assessed student achievement of your learning outcomes, when is assessment planned?)

- We have only completed one assessment cycle for this class. Since the course only has about 10 students per year, we were doing a two-year assessment cycle which has just ended this past spring. The data is currently being analyzed.

Follow-up (How have you used or how will you use the data to improve student learning?)

Budget Justification (What resources are necessary to improve student learning?)