# MAT220 : Discrete Mathematics & Introduction to Proofs

This introductory course is designed for prospective mathematics and computer science majors. It covers basic techniques of mathematical proof and reasoning, with an emphasis on discrete structures as well as concepts widely used in computing. Topics include set theory, functions, relations, proposition logic, methods of proof, mathematical induction, recursion, and Boolean algebra. Additional topics in discrete mathematics will be selected from number theory, combinatorics, graph theory, and finite state automata.

#### Credits 4

### **Prerequisites**

C- or higher in MAT180: Applied Calculus or MAT195: Precalculus with Trigonometry or satisfactory basic skills assessment score

#### **Semester Offered**

Spring

## Notes

Satisfies a Mathematics/Quantitative Reasoning general education requirement.