Dongseo University

Division of Computer Engineering

Discrete Mathematics

Instructor(s): Byung Gook Lee
Office: UIT Bldg.
Phone: 051-320-1727
Email: lbg@dongseo.ac.kr

Classroom: UIT Bldg.
Class Time: 
Office Hours:

Course Description:
The goal of the course is to introduce discrete mathematics and its computer science applications to have an adequate set of mathematical tools for problem solving in advanced courses. The course covers logic, sets, relations, functions, graphs, trees, combinatorics, and Boolean algebra.

Course Goals & Objectives:
At the conclusion of this course, the successful (passing) student will be able to
1. Use mathematical tools for problem solving based on discrete mathematics.
2. Better understand the relationship between computer science and discrete mathematics
3. Write simple algorithms to solve problems based on discrete mathematics.

Course Outline:

- Week 1  Set theory(1)
- Week 2  Set theory(2)
- Week 3  Set theory(3)
- Week 4  Functions and relations(1)
- Week 5  Functions and relations(2)
- Week 6  Functions and relations(3)
- Week 7  Number theory(1)
- Week 8  Mid-Term Week
- Week 9  Number theory(2)
- Week 10 Number theory(3)
- Week 11 Logic(1)
• Week 12 Logic(2)
• Week 13 Graph theory(1)
• Week 14 Graph theory(2)
• Week 15 Final Week

Textbook(s)
• Required:
• Recommended:

Class Website: e-Class

Course Assignments & Grading:
• Exams: 50% (Mid-term Exam 25%, Final Exam 25%)
• Quizzes: 0–10%
• Course Projects: 0–20%
• Assignments: 0–20%
• Bonus Credit: Attendance Points 20%
• Grading: A~A+ : 30%, B~B+ : 35%, under C+ : 35%

Grading Policies:
• Late Work: All assignments must be submitted on the due date. Late assignments will not be accepted.
• Make-Ups: There will be no make-ups given for any of the assignments in this course
• Contesting: Grades can be contested during a two-week period from the time that they are announced. After such period has elapsed, grades may not be contested

Course Policies:
• Attendance:
• Academic Misconduct Policy: Any form of cheating will be penalized and may result in failing the course or expulsion from the university