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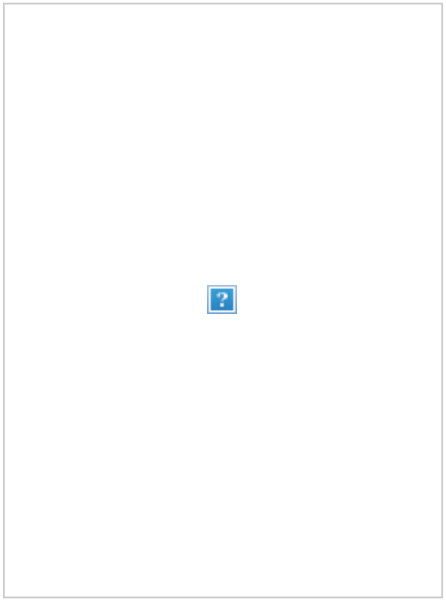
Math 361 Algebraic Structures II

Meets in
Bouillon 210
Special Needs
Please contact me if you have special needs.

Course Description

Algebraic Structures II is the study of various types of sets (categories) and their inherent structures.In this course, we examine Groups and structure preserving functions (homomorphisms).

Text



Schedule

Week 1-The FTA and factoring
Week 2-Polynomial Congruences
Week 3-Intro to Groups
Week 4-Groups and Homomorphisms
Week 5-Supgroups
Week 6-Groups and Geometry
Week 7-Groups and Geometry
Week 8-Glide Groups
Week 9-Permutation Groups
Week 10 ?
Final Exam:

Assessment and Evaluation

1) Homework 10%
2) Project 10%
2)Quizzes 10%
3) Participation 10%
3 Midterm 25%
4) Final Exam 35%

Final Grading

93-100% A

90-92% A-

87-90% B+

83-86% B

80-82% B-

77-79% C+

73-76% C

70-72% C-

67-69% D+

63-66% D

60-62% D-

Below 60% F

Objectives

1) Students will demonstrate reasoning and problem solving ability by modeling, generalizing, and justifying the main notions associated with Algebraic Structures, particularly Groups and homomorphisms.
2) Students will demonstrate excellent written and oral communication in their demonstrations of Objective 1).
3) Students will demonstrate cooperative learning skills both inside and outside of class.

About This Class

Algebraic Structures is traditionally a course in the mathematics curriculum that demands formal use of logic to prove theorems. The course content highlights a framework supporting nearly **ALL** modern mathematics. As such, the subject cannot be learned by cursory survey, but must be examined with intensity. Take time to think about and discuss ideas and to write and rewrite proofs.Make working with others a priority, but also take time to internalize the ideas yourself. Rewards for your hard work will include understanding the "superstructure" of mathematics.