Course Web Page: http://cims.nyu.edu/~liming/Algebra/2017.html

Office Hours: Wednesday 09:00–11:00 CIWW Room 720


Other References:

Teaching Assistant: Zhe Wang (zhe@cims.nyu.edu)

Grading Policy: Homework (20%), Quiz 1 (5%), Quiz 2 (5%), Midterm (30%), Final (40%).

Exam Schedule:
Quiz 1 ........................................ Oct.06 2017
Midterm ...................................... Oct.31 2017
Quiz 2 ........................................ Dec.01 2017
Final Exam .................................... TBA

Class Policy:
- Homework will be released each Thursday or Friday, and due on the following Friday during recitation. Late homework or emailed version shall NOT be accepted.
- You may discuss with your classmates about homework, but you should organize and write your solutions by yourself.
- We will not be able to accommodate out-of-sequence exams for purposes of more convenient travel, including already purchased tickets. Please note again the date of the exams and plan your travel accordingly.
- Exams will be close book. Books, paper or electronic material, calculator or electronic devices are NOT allowed during exams.
- The recitation is on Friday 15:30–16:45 at CIWW 517. The TA will discuss about some example exercises, remark on previous homework and review course material.
Tentative Course Outline:

09/05: Elementary Set Theory
09/07: Groups and Subgroups
09/12: Additive Integer Group and Its Subgroups, Cyclic Groups
09/14: Homomorphisms, Conjugations and Normal Subgroups
09/19: Isomorphisms and Automorphisms
09/21: Equivalence Relations
09/26: Cosets and Lagrange Theorems
09/28: Quotient Groups, Congruence of Integers
10/03: First Isomorphism Theorem
10/05: Direct Product of Groups
10/10: Symmetric Groups
10/12: Symmetric Groups
10/17: Group Actions
10/19: The Counting Formula
10/24: Class Equation
10/26: Review
10/31: Midterm
11/02: Rings and Integers
11/07: Polynomial Rings
11/09: Ring Homomorphisms and Ideals
11/14: Quotient Rings
11/16: Integral Domains and Maximum Ideals
11/21: Factorizations and Euclidean Domains
11/28: Unique Factorization Domains and Principal Ideal Domains
11/30: The Ring of Gauss Integers
12/05: Prime Ideals and Fields
12/07: Algebraic and Transcendental Elements
12/14: Review