

Algebra I

Schedule: *Tentative*

Date	Title & Note	Assignments
April 7	Lecture 1. Groups	Read 1, Ex. 1.1, 2, 24 and 2 from Ex.1
April 10	Lecture 2. Examples + Recitation	Read 2, Five from Ex. 2
April 12	Recitation Ex. 2 (Volunteers)	Review 2
April 14	Lecture 3. Finite Groups; Subgroups	Read 3, Five from Ex. 3
April 17	Recitation Ex. 3 (Volunteers)	Review 3
April 19	Lecture 4. Cyclic Groups	Read 4, Five from Ex. 4
April 21	Recitation Ex. 4 (Volunteers)	T/F and Five from Supplements 1-4
April 24	Lecture 5. Permutation Groups	Read 5, Five from Ex. 5
April 26	Recitation Ex. 5 (Volunteers)	Review 5
April 28	Lecture 6. Isomorphisms	Read 6, Five from Ex. 6
May 1	Recitation Ex. 6 (Volunteers)	Review 6
May 8	Lecture 7. Cosets and Lagrange's Theorem	Read 7, Five from Ex. 7
May 10	Recitation Ex. 7 (Volunteers)	Review 7
May 15	Lecture 8. External Direct Products	Read 8, Five from Ex. 8
May 17	Recitation Ex. 8 (Volunteers)	T/F and Five from Supplements 5-8
May 19	Lecture 9. Normal Subgroups and Factor Groups	Read 9, Five odds from Ex. 9
May 22*	Recitation of Odd Numbered Problems of Ex. 9	Read 9, Five evens from Ex. 9
May 24*	Recitation of Even Numbered Problems of Ex. 9	Review 1-9
May 26*	Lecture 10. Group Homomorphisms	Read 10, Five odds from Ex. 10
[May 31]	<i>Midterm Exam for Chapters 1-9</i>	Review Midterm and Read 10
June 5	Recitation of Odd Numbered Problems of Ex. 10	Read 10, Five evens from Ex. 10
June 7	Recitation of Even Numbered Problems of Ex. 10	Review 10
June 9	Lecture 11. Fund. Thm of Finite Abelian Groups	Read 11, Five from Ex. 11
June 12	Recitation of Ex. 11 (Volunteers)	T/F and Five from Supplements 9-11
June 14	Lecture 12. Sylow Theorems	Read 24, Five from Ex. 24
June 16	Recitation Ex. 24 (Volunteers)	Review 24
June 19	Review and Recitation	Preparation for Final Exam

*: C-Week Schedule

All assignments are due the day of next class. No class on May 29 and June 2 due to instructor's business trip, makeup on June 19. Algebra I final will be given during the term exam week.

Textbook for Algebra I and II Joseph A. Gallian, Contemporary Abstract Algebra – 8th Edition – International Version — Paper backs ISBN-13: 978-1133606758 640 pages, available at ICU Bookstore

Grading Policy Grade will be decided by the performance on the following: Home Work (30%), Class Participation by Solving Problems (15%), Midterm (15%) and Final Exam (40%).

Home Page and More <https://icu-hsuzuki.github.io/science/class/algebra1/index-j.html>

Schedule, references, old quizzes, old finals, old midterms and their solutions, and much more.

Author's Home Page: <http://www.d.umn.edu/~jgallian/>

Supporting documents, True/False Quizzes, software and much more.

<https://moodle.icu.ac.jp/27/course/view.php?id=1237>, Enrollment Key: alg2017

Sage, Computer Algebra: <http://www.sagemath.org/>

<http://subsite.icu.ac.jp/people/hsuzuki/science/computer/education/sage-j.html> (*Japanese Support*)

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