Algebra I

Schedule

Date	Title & Note	Assignments
April 12	Lecture 1. Groups	Read 1, Ex. 1.2, 1.3, 1.22
April 15	Lecture 2. Examples + Recitation	Read 2, Ex. 2.3, 2.8 + 3 others
April 17	Recitation Ex. 2 (Volunteers)	Ex. 2.24, 2.25, 2.35, 2.36, 2.37
April 19	Lecture 3. Finite Groups; Subgroups	Read 3, Ex. 3.1, 3.22 + 3 others
April 22	Recitation Ex. 3 (Volunteers)	Ex. 3.8, 3.12, 3.16, 3.26, (3.30 or 3.34)
April 24	Lecture 4. Cyclic Groups	Read 4, Ex. 4.1, 4.9 + 3 others
April 26	Recitation Ex. 4 (Volunteers)	T/F and 1, 4, 12, 22, 34 (see p.91-4)
April 29	Lecture 5. Permutation Groups	Read 5, Ex. 5.2, 5.4 + 3 others
May 1	Recitation Ex. 5 (Volunteers)	5 in Ex.5.8, 5.19, 5.25, 5.27, 5.48, 5.52
May 8	Lecture 6. Isomorphisms	Read 6, Ex. 6.4, 6.5 + 3 others
May 10	Recitation Ex. 6 (Volunteers)	Ex. 6.17, 6.32, 6.34, 6.37, 6.40
May 13	Lecture 7. Cosets and Lagrange's Theorem	Read 7, Ex. 7.1, 7.3 + 3 others
May 15	Recitation Ex. 7 (Volunteers)	Ex. 7.21, 7.22, 7.35, 7.40, 7.48
May 20*	Lecture 8. External Direct Products	Read 8, Ex. 8.2, 8.9 + 3 others
May 22*	Recitation Ex. 8 (Volunteers)	T/F and Ex. 6, 7, 18. 19, 32 (see p.174–7)
May 24*	Lecture 9. Normal Subgroups and Factor Groups	Read 9, Ex. 9.5, 9.15 + 3 odds
May 27	Recitation of Odd Numbered Problems of Ex. 9	Read 9, Ex. 9.4, 9.8 + 3 evens
May 29	Recitation of Even Numbered Problems of Ex. 9	Ex. 9.60, 63, 64, 65, 66
May 31	Lecture 10. Group Homomorphisms	Read 10, Ex. 10.5, 10.7 + 3 odds
June 3	Recitation of Odd Numbered Problems of Ex. 10	Read 10, Ex. 10.16, 10.20 + 3 evens
June 5	Recitation of Even Numbered Problems of Ex. 10	Ex. 10.36, 39, 55, 57, 59
June 7	Lecture 11. Fund. Thm of Finite Abelian Groups	Read 11, Ex. 11.3, 11.5 + 3 odds
June 10	Recitation of Odd Numbered Problems of Ex. 11	Read 11, Ex. 11.8, 11.10 + 3 evens
June 12	Recitation of Even Numbered Problems of Ex. 11	T/F and 9, 14, 15, 19, 41 (see p.230-3)
June 14	Lecture 12. Sylow Theorems	Read 24, Ex. 24.5, 24.7 and 3 others
June 17	Recitation Ex. 24 (Volunteers)	Review

*: C-Week Schedule
All assignments are due next class.
Algebra I final will be given during the term exam week. The schedule above is subject to change.

Textbook for Algebra I and II   Joseph A. Gallian, Contemporary Abstract Algebra – 7th Edition – International Version — Paper backs ISBN-13: 978-0-495-83153-2 574 pages + appendix 51 pages

Grading Policy   Grade will be decided by the performance on the following: Home Work (35%), Class Participation by Solving Problems (15%), and Final Exam (50%).

Home Page   http://subsite.icu.ac.jp/people/hsuzuki/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.
   Math Word Search, J to E and E to J: http://cpu.icu.ac.jp/math/search-text.cgi?
   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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