

Algebra II

Schedule

September 7, 2015

Date	Title & Note	Assignments
September 7	Lecture 1. Introduction to Rings	Read 12, and do 5 exercises
September 9	Recitation Ex. 12 (Volunteers)	Review 12
September 11	Lecture 2. Integral Domains	Read 13, and do 5 exercises
September 14	Recitation Ex. 13 (Volunteers)	Review 13
September 16	Lecture 3. Ideals and Factor Rings	Read 14, and do 5 exercises
September 18	Recitation Ex. 14 (Volunteers)	Review 14, and do 5 in Suppl. Ex. 12–14
September 25	Recitation Suppl. Ex. 12–14 (Volunteers)	Review 12–14 and T/F on p.281
September 28	Lecture 4. Ring Homomorphisms	Read 15 and do 5 exercises
September 30	Recitation Ex. 15 (Volunteers)	Review 15
October 2	Lecture 5. Polynomial Rings	Read 16, and do 5 exercises
October 5	Recitation Ex. 16 (Volunteers)	Review 16
October 7	Lecture 6-1. Factorization of Polynomials I	Read 17
October 9	Lecture 6-2. Factorization of Polynomials II	Read 17, and do 5 exercises
October 12	Recitation Ex. 17 (Volunteers)	Review 17
October 14	Lecture 7-1. Divisibility in Integral Domains I	Read 18
October 16	Lecture 7-2. Divisibility in Integral Domains II	Read 18, and do 5 exercises
October 19	Recitation Ex. 18 (Volunteers)	Review 18, and do 5 in Suppl. Ex. 15–18
October 21	Recitation Suppl. Ex. 15–18	T/F on p.347, read 19 and do 5 exercises
October 23	Recitation Ex. 19 (Volunteers)	Review 19
October 28	Lecture 9-1. Extension Fields I	Read 20
October 30	Lecture 9-2. Extension Fields II	Read 20, and do 5 exercises
November 2	Recitation Ex. 20 (Volunteers)	Review 20
November 4	Lecture 10-1. Algebraic Extensions I	Read 21
November 6	Lecture 10-2. Algebraic Extensions II	Read 21, and do 5 exercises
November 9	Recitation Ex. 21 (Volunteers)	Review Sheet
November 11	Review	Preparation for Final Exam

All assignments are due next class.

Algebra II 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 – 8th Edition – International Version — Paper back ISBN-13: 978-1-133-60675-8

Grading Policy Grade will be decided by the performance on the following: Home Work (40%), Class Participation by Solving Problems (20%), and Final Exam (40%).

Moodle and Home Page

Moodle: <https://moodle.icu.ac.jp/27/course/view.php?id=343> (No keys are required!)

<http://subsite.icu.ac.jp/people/hsuzuki/science/class/algebra2/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.

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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