

## Algebra II

### Schedule (*Revisited*)

Date	Title & Note	Assignments
September 8	Lecture 1. Introduction to Rings	Read 12, and do 5 exercises
September 10	Recitation Ex. 12 (Volunteers)	Review 12
September 13	Lecture 2. Integral Domain	Read 13, and do 5 exercises
September 15	Recitation Ex. 13 (Volunteers)	Review 13
September 17	Lecture 3. Ideals and Factor Rings	Read 14, and do 5 exercises
September 20	Recitation Ex. 14 (Volunteers)	Review 14, and do 5 exercises on p.276–279
September 22	Review of 12–14	Review 12–14 and T/F on p.276
September 24	Lecture 4. Ring Homomorphisms	Read 15 and do 5 exercises
September 27	Recitation Ex. 15 (Volunteers)	TBA
September 29	Review of Ring Homomorphisms	Review 15
October 1	Lecture 5. Polynomial Rings	Read 16, and do 5 exercises
October 4	Recitation Ex. 16 (Volunteers)	Review 16
October 6	Lecture 6. Factorization of Polynomials	Read 17, and do 5 exercises
October 8	Recitation Ex. 17 (Volunteers)	TBA
October 11	Review of Factorization of Polynomials	Review 17
October 13	Lecture 7. Divisibility in Integral Domain	Read 18, and do 5 exercises
October 15	Recitation Ex. 18 (Volunteers)	Review 18, and do 5 exercises on p.341–342
October 18	Review of 15–18	T/F on p.341, and read 19
October 20	Lecture 8. Extension Fields	Read 20
October 22	Lecture 9. Extension Fields - Continued	Read 20, and do 5 exercises
October 25	Recitation Ex. 20 (Volunteers)	TBA
October 27	Review of Extension Fields	Review 20
October 29	Lecture 10. Algebraic Extensions	Read 21, and do 5 exercises
November 5	Recitation Ex. 21 (Volunteers)	TBA
November 8	Review of Algebraic Extensions	Do 5 exercises on p.399–400 (1–13, 16, 21–22)
November 10	Review	Preparation of 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 – 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 (40%), Class Participation by Solving Problems (20%), and Final Exam (40%).

**Home Page** <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.

Hiroshi Suzuki (Email: [hsuzuki@icu.ac.jp](mailto:hsuzuki@icu.ac.jp))