

# Abstract Algebra, Spring 2015, Unit 3 Plan

<b>Mon</b>	<b>Wed</b>	<b>Fri</b>
Apr 13, 2015	Apr 15, 2015	Apr 17, 2015
6.1 Parallels to $\mathbb{Z}$ -II W 6.1.19 Prepare for exam	<b>Exam 2</b> D 6.1: 25, 30*, 32(i)(ii) R 6.2, RQ	6.1 Parallels to $\mathbb{Z}$ -III W 6.1.26* D 6.2: 35, 40(i)*, 49(i) R 7.1, RQ
Apr 20, 2015	Apr 22, 2015	Apr 24, 2015
6.2 Irreducibility W 6.2.37(i) D 7.1: 2, 4(i)-(iv), 7, 14(i) R 7.2 up to p 292, RQ	7.1 Quotient Rings <i>Last day to withdraw</i> W 7.1.12 D 7.2: 27, 29 R 7.2 up to p 299, RQ	7.2 Field Theory-I W 7.2.30* D 7.2: 31, 32, 33 R 7.2 (finish), RQ
Apr 27, 2015	Apr 29, 2015	May 1, 2015
7.2 Field Theory-II <b>Quiz 4</b> (Extension Fields) W 7.2.36* D 7.2: 41, 42, 45 R 8.1, RQ	7.2 Field Theory-III W 7.2.39* D 8.1: 1*, 2, 5, 7 R 8.2 up to p 343, RQ	8.1 Arithmetic in Gaussian and Eisenstein Integers W 8.1.6 D 8.2: 8*, 10, 11, 15, R 8.2 (finish), RQ
May 4, 2015	May 6, 2015	May 8, 2015
8.2 Primes in the Gaussian Integers W 8.2.9 D 8.2: 18, 21, 26(i)-(iv) R 8.3, RQ	8.2 Primes in the Eisenstein Integers W 8.2.20 D 8.3: 30, 31, 33 R 8.4, RQ	8.3 Fermat's Last Theorem for Exponent 3 W 8.3.32 Prepare for exam
May 11, 2015	May 13, 2015	May 15, 2015
<b>Exam 3</b> D 8.4: 38, 45, 46 RQ 9.4	8.4 Approaches to the General Case W 8.4.47 RQ 9.5	9.5 Wiles and FLT <i>Last day of class</i>  <i>Final Exam:</i> Tues, May 19, 8am - 10am

\*An asterisk next to a problem indicates that I have modified the problem or provided a hint. (A problem in parentheses is a challenge problem. Make sure you understand the other problems before attempting the challenge problems.)