M431, Spring 2014

MONDAY	WEDNESDAY	FRIDAY
Jan 13th **1** Discussion of prerequisites Classes Begin	15th **2** Ch.12	17th **3** Ch. 12
20th Martin Luther King Day no class	22nd **4** Ch. 13	24th **5** Ch. 13 **HW1 due**
27th **6** Ch. 13 Ch. 14 - defns, examples	29th **7** Ch. 14 - factor rings, constructing fields	31st **8** Ch. 14 - more factor ring examples **HW2 due**
Feb 3rd **9** Ch. 14 - prime, max ideals	5th **10** Ch. 14 - prime, max ideals	7th **11** Ch. 15 - homomorphisms, defns, examples
10th **12** **Test 1** **HW3 due**	12th **13** Ch. 15 - examples, 1st isom theorem	14th **14** -BLIZZARD-
17th **15** Ch. 15 - 1st isom theorem, fields of quotients	19th **16** Ch. 16 - the division algorithm	21st **17** Ch. 16 - cors to div alg, PIDs **HW4 due**
24th **18** Ch. 17 - defns, $Z[x]$	26th **19** Ch. 17 - mod p test, Eisenstein's	28th **20** Ch. 17 - when is $\langle f(x) \rangle$ max
Mar 3rd **21** Ch. 17 - constructing fields, dice app	5th **22** Ch. 18 - defns, examples, FLT	7th **23** **Test 2** **HW5 due**
10th Spring Break	12th Spring Break	14th Spring Break
17th **24** -SNOW DAY-	19th **25** Ch. 18 - UFDs, PID implies UFD	21st **26** Ch. 19 - lin alg review
24th **27** Ch. 19 Ch. 20 - fund. theorem	26th **28** Ch. 20 - examples, splitting fields	28th **29** Ch. 20 - splitting fields, examples, $F(a) \cong F[x]/\langle p(x) \rangle$ **HW6 due**
31st **30** Ch. 20 - uniqueness, $f'(x)$ Ch. 21 - defns	Apr 2nd **31** Ch. 21 - finite implies algebraic, tower rule	4th **32** Ch. 21 - tower rule proof
7th **33** Ch. 21 - $F(a,b) = F(c)$ **HW7 due**	9th **34** Ch. 22 - existence, structure of finite fields	11th **35** Ch. 22 - subfields, examples
14th **36** Ch. 32 - automorphisms of fields	16th **37** **Test 3** **HW8 due**	18th **38** Ch. 32 - automorphisms of fields
21st **39** Ch. 32 - automorphisms of fields *Deelan and Traymon*	23rd **40** Ch. 32 - a more sophisticated example *Jacob, Lacey, Rachel*	25th **41** Ch. 32 - s. f. of $x^3 - 2$ *Ryan and Philip*
28th **42** Ch. 32 - s. f. of $x^4 - 2$ *Chris and Denise*	30th **43** Ch. 32 - Galois theory *Greg and Kirill*	May 2nd **44** No Class
5th **45** **Final Exam** **10:30am-12:30pm** **HW9 due**	7th **46**	9th **47**