

## MATH 4030, MWF 12:55 - 1:45 IN LCB 215

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### 1. GRADE AND SYLLABUS

For this course, we shall use Aaron Bertram's notes available on

<http://www.math.utah.edu/~bertram/courses/4030/>

Grade will be based on two exams (contributing 15% each to the final grade), following the first and the second chapter of Aaron's notes, the final exam (30%) and homework (40%). The homework is contained in the notes. There are 10 HW sets, so they will be due approximately every week or every other week, depending on the circumstances. Should you need some help with the material or HW, stop by my office. (My office hours are MWF, 11:00 - 12:00, or after the class.) Instead of fixing daily topics in advance, I will try to keep a course log:

### 2. COURSE LOG

08/24 Mathematical induction and natural numbers.  
08/26 Addition of natural numbers.  
08/28 Multiplication of natural numbers.  
08/31 Euclidean algorithm.  
09/02 Uniqueness of factorization.  
09/04 Integers and groups.  
09/07 Labor day.  
09/09 Rational numbers and equivalence relation. HW I due.  
09/11 Operations with rational numbers.  
09/14 Real numbers: Dedekind cuts.  
09/16 HW II due. Operations with real numbers.  
09/18 Decimal expression.  
09/21 HW II review.  
09/23 HW III due. Exam review.  
09/25 Exam I  
09/28 Exam review.  
09/30 Complex numbers: definition and polar coordinates.  
10/02 Complex numbers: exponential function,  
10/05 Roots of one.  
10/07 HW IV due.