

**Math 347 Honors – Fundamental Mathematics**  
Spring Semester 2009, section X1H  
MWF 12:00-12:50, Altgeld 341

**Instructor:** Kevin Ford

**Office:** Altgeld 304 (phone 265-6255, e-mail: ford@math.uiuc.edu)

**Office Hours:** MWF 11:00-11:50 or by appointment

**Web page:** <http://www.math.uiuc.edu/~ford>

**Text.** *Mathematical Thinking: Problem-Solving and Proofs*, by D'Angelo and West, 2nd edition. The goal of the course is to become a better problem solver, learn basic concepts of higher mathematics, and to become competent in writing mathematical proofs. In this honors section, we will examine the material more deeply and study some more advanced topics than in the regular sections.

**Pre-requisites.** Math 242 or equivalent. Concurrent registration in Math 242 is acceptable.

**Regular Homework.** Every Friday (except Jan. 21) a homework assignment will be due. The problems (usually 5) will be given on the previous Friday. Assignments and solutions will be posted on the class web page immediately after Friday's class. **NO LATE HOMEWORKS WILL BE ACCEPTED FOR ANY REASON.** If you have a reasonable excuse for missing an assignment, I will score it by the average of the other assignments.

**Honors homework.** About every 3 weeks there will be a special honors assignment due. These are usually more challenging problems that will take longer to solve.

**Exams.** Two "midterm" exams will be given during the semester (dates to be announced). **Make-up exams will not be given.**

**Grades.** The course grade will be determined by

$$G = 0.10 \times H_r + 0.10 \times H_h + 0.25 \times (M_1 + M_2) + 0.30 \times F,$$

where  $H_r$  is the average of the regular homework grades (the lowest one will be dropped),  $H_h$  is the average of the honors homework grades,  $M_1$  and  $M_2$  are the midterm grades and  $F$  is the final exam grade (exams are worth 100 points each). In other words, the final grade is determined by homeworks (20%), midterm exams (25% each), and the final exam (30%). All grades will be numerical (e.g. 0–100). For final course grades, 90% guarantees you an A-, 80% guarantees you a B-, etc. Intermediate grades will also be given, e.g. 87% guarantees you an  $B+$ .

**Final Exam:** Wednesday, May 13, 7-10 PM, regular classroom.