Syllabus : Math 453, Fall 2017

Meeting place and time: Rec 122, MWF 10:30-11:20 AM.
Instructor: Saugata Basu
Office: Math 742
Email: sbasu@math.purdue.edu
Webpage: www.math.purdue.edu/~sbasu/teaching/fall2017/453/453.html
Office hours: Tues 10-12 AM or by appointment.

1. Textbook for the course: We will loosely follow the book "A Book of Abstract Algebra" by C. C. Pinter (Dover).
2. Rough list of topics to be covered.
    i. Sets, maps, equivalence relations.
    ii. Natural numbers and the principle of induction.
    iii. Groups.
    iv. Rings.
    v. Fields and vector spaces.
    vi. Introduction to Galois theory (if time permits).
3. There will be weekly assignments to be handed in. You are free to ask me questions and collaborate but must write the solutions on your own. Please do not consult the internet for solutions. Proofs must be written using complete grammatically correct sentences. Please do not be sloppy.
4. There will be two in-class mid-term exams, and a final exam. Dates to be announced later.
5. The weightage towards the final grade will be as follows:
    i. Homework: 20%
    ii. Mid-terms: 25% + 25%
    iii. Final Exam: 30%
6. **Important note**: The major goal of this course is to learn how to *read, understand and construct proper mathematical proofs*. The assignments and the exams *will require writing proofs* and not just mechanical calculations.
7. Accommodations are managed between the instructor, student and DRC Testing Center. Students should see instructors outside class hours – before or after class or during office hours – to share your Accommodation Memorandum for the current semester and discuss your accommodations as soon as possible.