# Math 4713, Number Theory , Fall 2015 

MWF 12.30-1.20 CLB 203

INSTRUCTOR: Amit Ghosh
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OFFICE HOURS: TBA

TEXT: Elementary Number Theory: Primes, Congruences and Secrets by William Stein. A free copy can be downloaded from http://wstein.org/ent/ .

COURSE DETAILS: I will cover at least Chaps: $1,2,4,5$. If time permits, will cover Chap.5. Will discuss parts of Chap. 3 .

PREREQUISITES: An ability to understand and do proofs.
HOMEWORK: Homework will be assigned daily but not collected. Special homework, which will be graded by a grader or me, will be assigned generally on Mondays and are due on Fridays. No late submissions will be accepted. You must write in a clear way so that the grader can understand your logical thought process and give partial credit where applicable. The top 10 scores will be taken towards your homework score.

CALCULATORS: Electronic calculators may be required for some of the homework problems. They will NOT be permitted in exams. Answers should be given in an exact form unless a numerical approximation is specifically requested. I recommend you not rely too much on a calculator for homework as you will then not do well in the tests and exams.

ATTENDANCE: Attendance of lectures is mandatory, but roll will not be taken in class. You are responsible for knowing the material, assignment, etc. presented in the class. If you miss a class, make sure your notes are up to date .... speaking of which, I don't have notes.

HELP:

- I am available during office hours, or at other times by appointment. Office hours: see above.
- Use the Math Learning Success Center. The MLSC offers tutoring for Math 2233.
- Discuss the problems with your friends, but write up the solutions on your own.

EXAMS: We will have 3 in class midterms (dates will be announced here).

- MIDTERM 1: TBA
- MIDTERM 2: TBA
- MIDTERM 3: TBA

FINAL EXAM DATE:
Dec 9th, 10.00 -11.50 am

GRADING: There will be no makeup exams unless your circumstances are very unusual (documentation may be needed). Your grade will be based on $100 \times 3$ for the 3 midterms, 150 for homework and 150 for the final. Students who achieve at least $90 \%$ are guaranteed to receive an A. A score of at least $80 \%$ will receive at least a grade of B. A score of at least $70 \%$ will receive at least a C, and students with scores at $60 \%$ or above will be assured of passing. Some discretion may be used in deciding borderline cases, based on my subjective judgment of students' effort and performance.

STUDY HINTS: Go to every class meeting and get help when you need it! Don't be afraid to ask questions, in class or out of class. The MLSC is available for tutoring and I am anxious to help you. But only you will know when you need it. I will likely not know you need help until after an examination, which is often too late. Do the homework! As soon as possible after class, review your notes and make an outline of the class notes paying particular attention to the definitions and theorems discussed that day. Redo the examples from class in light of your outline. Then do the homework problems. Work out homework problems on scratch paper before looking at the answers in the book. Concentrate on what you are doing rather than being distracted by the radio, TV, or conversation with friends. On average you should expect to spend a minimum of three hours on homework for every class period. However you should not be discouraged if it takes you longer to complete the homework assignments. In addition, extra time will be needed to study and review for examinations.

Any changes to this syllabus will be announced in class.
The link_
http://academicaffairs.okstate.edu/
contains useful information concerning important dates, academic integrity and students with disabilities.

