Textbook: Instead of a boringly glossy textbook, we use the Department Notes available at Graphic Creations. These notes do NOT come with a CD, nor with multicolor print. They are meant for careful reading. (They are NOT easy reading at all, and ability to work with them is part of the course goal!) I’ll guide your study of them and help you discussing your solutions, possibly by giving you extra examples.

Course contents: This is more a language course than a course about new concepts. You do know already about sets, about real numbers etc. But without the more refined understanding of these fundamental concepts that you are to get in this course, mathematics could not have proceeded as far as it did.

You will learn how to read, write and present mathematics and how to prove theorems. This involves in particular a training in careful reasoning (hypothesis, conclusion), a skill that is useful far beyond mathematics. Class participation issues: I will select students at random (drawing from a deck of cards) at least once a week for presentation of homework at the blackboard. And I will also ask you questions about assigned reading of the course notes. Correct answers will require that you have understood the assigned reading. This would not be fair, except for the following quirk: You may ask me specific and meaningful questions on the assigned reading first. This will be considered equivalent to a correct answer to the question I was going to ask. You will notice that it is not easy to come up with a good question, and the attempt to do so during your preparation for class will actually be helpful to find answers to what seemed unclear to you at first. So while there is no formal attendance requirement, you need to be present, because you miss the question in case you are drawn and absent. (A small number of misses will be pardoned, and excused absence for good reasons is possible.)

Total grade: Your total score will consist of an exam score and an oral score (which latter includes homework):

• exam score: The exam score consists of 3 midterm exams, and the final exam. Whichever of the following two weighted averages turns out better for you will apply to you: Either each of these four counts 2/8, or else the final counts 3/8, and the midterms count 2/8, 2/8, 1/8 (with your weakest midterm counting 1/8).
• oral and hwk score: class presentation 1/3, homework 2/3, or vice versa, whichever is better in your case.
• finally, exam and oral/hwk scores are averaged with equal weight.

Written homework problems and oral presentations: Arguments have to be presented clearly and in a formally correct way. There will not be much partial credit: Each hwk problem and each class presentation is worth 0,1, or 2 points, no splitting. Questions I am asking on reading material – (or you are asking me first) go in the class presentation score.

I have scheduled regular office hours Monday 11:15-12:00 and Wednesday 2:30-3:30. You are welcome to request an appointment at other times or drop in. I accommodat drop-ins, whenever feasible, even though I cannot always guarantee immediate availability. My office is Ayres 317 E, phone 4-5325. Email is denzler@math.utk.edu, but I may not read it for half a day or for an entire weekend.