In designing the schedule of Math 1 for the Fall of 2005, we picture a week both starting and ending on Monday. We addressed each of the course goals and set aside in-class time to help meet them. While the course goals are set, if some of the activities do not seem to be working towards these goals, we will be revising the schedule to better suit the needs of the students.

In order to help develop your problem solving skills, we have weekly problem solving sessions on the week’s material. These problems will be designed to make you think, and we do not expect them to be solved quickly. The problem solving sessions are on Friday and Monday and will take most of the scheduled class time.

To develop your mathematical communication skills, there will be written assignment. In these write-ups, we expect to see equations, figures, and diagrams as well as complete English sentences explaining not only what you did but why you did it. These write-ups will directly relate to problems you receive in the problem solving sessions, and will sometimes be given as individual assignments and sometimes as group assignments.

The rest of the week will be lecture, which is designed to develop your mathematical toolbox. We do not expect you to know any calculus upon entering this course, and will also review algebra and trigonometry. These will be your problem solving tools, as addition, subtraction, multiplication, and division have become tools for balancing your checkbook. Many of your mathematics classes up to this point have probably focused on this toolbox, and we hope to add a few tools to it. Homework assignments and quizzes will focus on these tools and test your understanding of them.

Everyone here is a talented student, and we expect many of you have not had to study for exams or needed to spend much time on school work outside of class. Welcome to college. The courses you are in are all difficult, and, if you have not already, you will need to develop effective study habits. We are here to help you. Part of effective study habits is working on homework every day. You will have assignments due on Sunday, Tuesday, and Friday for this course. There are all assignments on the material from the previous week, so you have plenty of time to work on them. Quizzes will be held on Wednesdays. The Sunday and Tuesday assignments are toolbox problems, while the Friday assignment is from the Friday and Monday problem solving session. We strongly encourage you to work on your assignments early.

Another part of effective study habits is knowing where to get help, and not being uncomfortable asking for help if you need or want it. We have set up several ways to get help. If you seek clarification on a topic, there are four
tutors for the course. You will be placed in a study group with one of these tutors, which we encourage you to attend, even if you don’t need any help. Another way to get help is to attend office hours. Both course instructors have several hours where they will be in their office and devoted to helping the students in the course. We would like you to stop by if you have any questions, concerns, or if you just want to talk. If you do not understand the material, the tutors will refer you to office hours and we will be happy to explain things in another way or go through some examples with you, or whatever you need. You do not need to show up at the start of office hours, but can drop in at any point. If the office hours do not work for you or you would rather talk to the instructor privately, you are invited to send an email to schedule some time and talk to us one on one. We will be available at many different times so suggest a time that works for you in your email.

For the problem solving sessions, you will be asked to work in groups. This does not mean that you should work individually and compare your answers, but that as a group you should decide how to attack the problem, what tools to use, and make sure everyone understands not only the problem but how this method will help arrive at a solution. Also, be sure that everyone understands the solution once it is reached, and what it means in terms of what the problem asks. Remember, the answer to a word problem is a sentence, not just a number.

All of this is what you will be asked to do beyond college, if you see any math. You will not be working as an island, but working in groups. The problems will not be as clear cut as what you see in your classes and your solution means nothing if you can’t explain it. This is probably very different from what you have seen in math so far, but most of you are not planning to go into mathematics, so it is more important to you and your future endeavors to know how to apply the tools at your disposal than to have tools in your toolbox that you don’t use.