Math 152: Mathematical Algorithms in Maple

Basic info

Meeting times: TTh 4-6:50 (Feb. 23–Apr. 5 only)
Room: Weber 205 (math computer lab)
Course website: www.math.colostate.edu/~bates/courses/S09/152/
Text: There is no book for this class. Prof. Anton Betten wrote up some notes (available on the course website), but the main reference will be the lectures that I post on the course website.
Instructor info: Prof. Daniel Bates (Dan), bates@math.colostate.edu, Weber 221 (1-1037)
Office hours for 369: MW 1-2 in WB 205

About the class

Prerequisites: None whatsoever.
Topics: Maple is handy both for symbolic-numeric computation and for getting your hands dirty with programming (loops, recursion, functions, etc.). As a result, we’ll dig into both aspects.
Structure of the class: Each class is around 3 hours long (yikes!). For the first hour or so, I will walk you through the lecture – I’ll project my screen onto the wall while you click through it yourselves. After that, you’ll have a couple hours to work on a lab assignment on your own (though I’ll circulate around the room until 6:50 or so). This should all be pretty informal, so feel free to ask questions as we go. I won’t schedule in a break since everybody is working independently after the “lecture” – just come and go as you see fit.
Labs: There will be one lab from each class. Each lab will be worth 10 points and will be due at the beginning of the following class meeting. Late labs will NOT be accepted unless your excuse satisfies university requirements and you provide all appropriate documentation to back it up. The labs will involve creating Maple input to solve some problem(s) using the tools that you have learned so far during the class. I suspect that two hours will be more than enough time for each lab.
Please do not include extraneous stuff in your lab. Answer each problem as succinctly as possible. Also, please include comments to make it clear what you are doing and number each problem using a comment before your answer. All told, be as organized as possible. The more organized you are, the more likely it is that I’ll understand what you are doing and can award partial credit if you make a mistake.
To turn in your lab, please name it “YourLastName.lab.LabNumber.mw” and attach it to a message to bates.maple@gmail.com with the subject “YourLastName lab LabNumber.” For example, for my third lab, I’d call it bates.lab.3.mw and attach it to an email with the subject “Bates lab 3.” I will open your lab, click “execute all” and make sure that all of the answers are correct. This will be pretty black and white – either it works or it doesn’t. If it doesn’t, don’t count on much (if any) partial credit. My advice to you is to complete the assignment, close Maple, re-open your assignment, and click through it just like I will. If something doesn’t work, then you know that you need to fix it.
I’ll have office hours in the computer lab (WB 205) as listed above. Please come to me then with any problems that you are having with the lab due the next day. If you absolutely cannot make office hours, then let me know and either I’ll help you via email or we can set up an appointment. Your best bet is to get your lab done during class.
Quizzes, exams, final: There won’t be any of these! Just 10 labs, each worth 10 points.

Other stuff

Feedback: I want it! I want this class to be useful for you. If you are concerned about some aspect of the class or have some idea about how to make it better, please let me know, even if the improvement can’t be used until the next time I teach M152.
Final Note: You should know that I have insulin-dependent diabetes and may therefore need to sit down and take it easy occasionally. There is also the very slight risk that I could have very low blood sugar at some point, causing me to pass out. If that happens (and rest assured, it never has before and almost certainly will not during this semester), I will need somebody to call 911. Please don’t worry: I haven’t passed out yet and don’t intend to!