

MATH 152 Mathematical Algorithms in *Maple* Spring 2012

- **Instructor:** Lori Ziegelmeier
- **My Office:** Weber 234
- **My Email:** ziegelme@math.colostate.edu
- **When and where:** 02/20-04/01 T R 4:00 - 6:50 Weber 205
- **Texts:** None required.
- **Office Hours:** By appointment only

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. 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. As a heads up, it will most often be possible to finish the lab by the end of our 3 hour period, so it may be to your benefit to stick around and just get it done while both I and your classmates are around...

Labs: There will be one lab from each class. Each lab will be worth 10 points and will be due by 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. You are encouraged to ask your neighbors questions on the lab, but make sure that you are doing your own work. Likely, I will require the last lab to be done individually.

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 print out your .mw file with all commands executed. 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. You will be expected to read all directions carefully!

I don't plan to have official office hours unless there seems to be a wide need. Maple has a pretty great Help system (comparatively), and you should use each other as a resource. If a question comes up that you're having trouble finding the answer to in these other places, then let me know and either I'll try to help via email or we can set up an appointment to meet in the lab. I'm here to help, but part of my goal for you is to help you be self-sufficient in answer general questions about the software. 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. Note: you must do each lab to receive an A in the class.

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 Math152.