

Here, I go through the comments and state my responses to those comments.

The things people thought were going well concerning my teaching/organization:

- Good examples
- Clear lectures
- Good enthusiasm
- Good at answering questions
- I like the way you write out problems
- You explain the concepts
- I like that you put up quiz solutions

My response: Thanks for these comments. I will continue doing these things to the best of my ability.

Other things going well:

- There are lots of resources available
- This is easier than Calc 1 (one person said this)

My response: This is also nice to hear from those of you who said them. For those of you who are unaware, there are many resources available, including videos in LON-CAPA, the Math Help Rooms, piazza, and emailing me.

The things people thought could be improved concerning my teaching:

- Nothing to change

My response: Thanks.

- You should do more examples
- Spend more time on examples and less time on explaining the concepts
- Not all of the examples help with homework

My response: I only have a limited amount of time to spend on examples. And I do need to explain some theory. You would have no idea what was going on if I just gave you formulas and processes without explaining where those things came from (imagine if I had just told you the process for doing the integrating factor method without explaining where it all came from). Understanding the concepts is actually what I deem to be the most important part. In the real world, you have programs to perform the calculations for you, but you have to understand what technique to use. All that being said, I put far, far more focus on examples in this class than I do in other classes I've taught in the past.

- Spend more time on difficult sections

My response: Sorry, I can't. The schedule is predetermined, and I cannot deviate from it.

- You block the board sometimes when you're writing
- You go through the notes too quickly
- Post lecture notes online

My response: Because of these three comments, I have started posting my notes online. I will also be more cognizant of blocking the board while writing.

- You should show us the shortcuts we can use

My response: There aren't actually all that many shortcuts I could show you in this class. There are a few things where I could have given you some shorter methods than what I showed you, but the problem with shortcuts is that you have to be able to understand *when* you can use them before you can actually use them. Shortcuts don't work in every situation, and I know that if I went over them, some people would try to apply them in situations where they cannot be applied. Again, all that being said, there haven't been too many instances of places where you could even have shortcuts.

- The notes are too wordy

My response: Studies in math education suggest that if I don't write something on the board, you won't write it in your notes, and you'll forget about it. I tend to be a little wordier in my notes so that you will be able to look back at your notes later and understand what's going on better. The wordiness also depends on whether we're introducing a brand new concept or if we're doing applications, and when we have application problems.

Things people thought could be improved about homework, exams, LON-CAPA:

- HWs are too long and difficult
- Exams are difficult

My response: These can both be quite difficult. I do not pick the problems (Owen Davis does), however. It seems that this year, some of the questions are simpler than they have been in the past, so that helps compared to people who took MA 16020 in the past. Additionally, Owen Davis has dramatically reduced the homework load for 16020 compared to other semesters (each lesson used to have two homework assignments – A and B – so for example, you would have had HW 2A and HW 2B both on lesson 2).

- HW should be due *after* the next class so we can ask questions
- Please explain difficult problems from last homework

My response: This is a new policy that Owen Davis put into place starting this semester (for homework to be due before the next lesson). A few other math classes use it. The justification is that you have access to LON-CAPA. It also gives me more time in class to go over new concepts and example (which we saw above people want). Because of this, Owen Davis recommended we do not go over HW before class. If you have a question over an old homework, you can go to the Math Help Room, post on piazza, or email me.

- Exams should be multiple choice
- LON-CAPA should allow more than 10 attempts per problem
- Too many word problems in general

My response: These are all things that Owen Davis is in charge of. I can't comment on exams being multiple choice. Owen wants you to think very carefully about your homework before trying to submit an answer, which is why he limits it to 10 attempts. Far too often, people will just randomly throw stuff in the solution box if they have more attempts. As far as word problems go, this is an *applied* calculus class, after all, so we should have plenty of word problems.

- LON-CAPA is the worst online homework system

My response: The Math Department just started using LON-CAPA a couple years ago, and we've had to build our own content for it. There are still some bugs here and there, but most of them have been worked out. Switching to LON-CAPA was highly supported by the Provost at the time since LON-CAPA does not cost you anything to use and you don't have to purchase a textbook. If we weren't using LON-CAPA, you would have to purchase access to an online homework system (usually about \$50 per semester). As far as the strict inputs go, it can be annoying, and maybe that is something for the LON-CAPA coders to look into.

- Exams not accurately assessing how well we know the material

My response: This is a serious concern, and if you believe that the exams are not accurately assessing how well you know the material, please contact Owen Davis about that.

Things people thought could be improved about the structure of the class:

- Too many emails
- One-line calculator is difficult to use

My response: These are things in Owen Davis's control. It's been a long-standing policy of the applied calc courses and lower level courses here that you are only allowed a one-line calculator. If this is too difficult, then you should contact Owen Davis.

- Coffee
- Have snacks on Friday

My response: What a wonderful world it would be if I could bring coffee for you and have snacks for you on Friday, but I cannot afford it and don't want to deal with the issues concerning health risks with it.

- There are disruptive students who are distracting

My response: To all students, please be considerate of your classmates.

- Quiz should not be over last class's material

My response: It would be unfair to give you a quiz over material you haven't had a chance to practice, so I have to give it to you at least the next day. By Math Department policy, I am supposed to give quizzes at the end of class.

- The blackboard is dirty, so it's hard to see
- Class is too early

My response: Unfortunately, these are things I don't have control over and cannot change.

- We don't have a sense of what our grade will be

My response: This is true for pretty much every math class at Purdue. It is very frustrating, but it is designed to help students. I've never failed (D or F) a student who deserved to pass a math class here, but I have passed (C- or higher) plenty of students who probably should have had to retake the class, so in terms of *passing* the grading scale is actually pretty generous. You can get an okay sense of what your grade is by looking at your exam letter grades. You can also look at your quiz scores compared to the average quiz scores. Owen Davis has sent out a few emails about how you can get somewhat of a sense of your grade.

Things people thought about the quizzes:

- Good/fine

My response: This was by far the most received comment, with over 50% of my students saying this. In other words, most of you like the quizzes just as they are.

- Quizzes are too long
- You should have 2 problems with 10 minutes (to mimic the exams)

My response: I would say about half so far mimic the exam's timing. I have given you extra time for application problems, however. The overwhelming majority of the students finish the quiz before time is called, so I will not be shortening the quizzes in any way unless I deem it necessary for some reason.

- The material is too hard
- Quizzes are too easy compared to exams

My response: These are valid comments from different perspectives, but they contradict each other. I cannot do both. But based on all comments together, people like the current difficulty.

- We have too many quizzes

My response: I have to give at least 15 quizzes in a semester, which works out to at least one per week. Additionally, if I give a considerable amount more than 15 quizzes, more quizzes can be dropped at the end of the semester.

- There should be a quiz schedule

My response: I am advised not to do this, but I might start doing it anyway.

- Quizzes should be on more basic concepts rather than more advanced concepts

My response: Partial credit is awarded based on how well you understand the material. If you understand the basic concept, you will get most of the points.

- The final answer on quizzes should be graded easier
- Partial credit is nice
- Graded too hard

My response: I do give partial credit. The final answers for all questions combined on any given quiz is worth a maximum of 2 points out of 10 points on the quiz. Most of the harsh grading penalties come from algebra mistakes or computation mistakes. LON-CAPA exams are more strict on this than I am, so I am trying to get you to be more careful about those small mistakes.

Thanks for all of your comments! If you have any more, feel free to email me, talk to me, or leave a message for me (you can slide a sheet of paper under my office door, MATH 645, with my name on it).