

I am a tutor for engineering students through the Engineering Department for Math 217 along with other courses I have taken. I am currently tutoring 5 Math 217 students, and I have received tutoring requests by at least 6 other students throughout the semester. At the beginning of the semester, many of the students seemed to have similar issues to the students I tutor for other engineering classes (trouble with homework, not understanding new concepts, reviewing for an upcoming test), but as the semester continues, I have realized that the students in Math 217 as a whole are struggling much more than the students I tutor for other engineering classes.

A couple of my concerns with this class are:

1. The students do not understand the lectures, and the book does not compliment all the material covered in the lectures. I found the textbook they are using to be very helpful to me when I was taking the course, but some of the concepts they are covering are not explained in the text, or they go by a different name in the text. One of my tutoring students also relayed to me that she was told to watch one of the MIT lectures when she told the professor she was having homework problems and could not find the material in the book.
2. Most of the homework and lecture topics are from the MIT differential equations course. The students do not feel like they are taking a Washington University course when their professor takes the homework problem sets and lecture topics directly from another university. Most of my tutoring students still attend all the classes, but some of their friends watch the MIT lectures online instead of going to class because they cover the same material and they can watch the lectures during times that are convenient to them.
3. The topics covered in the class are very focused on the concepts and derivations instead teaching the students solve differential equations. Some of this material is relevant to math major students, but the primary goal of the class from an engineering standpoint is to teach students how to solve differential equations so they can use these skills in their upper level engineering classes. Even though this class is taught through the math department, the vast majority of the students in the class are engineering majors, so the class should meet the needs of the majority of the students if the professor is going to restructure the course.
4. I don't think the class is going to cover all the material that is traditionally covered in the class. The course has just begun to cover laplace transforms in the past week. Eigenvalues and power series solutions have not been covered, and the unit on laplace transforms has been much shorter than it has been in past years. The course has also been covering Fourier series and delta and unit step functions for the past few weeks. These are topics that are not usually covered very extensively, or are covered in ESE 317 (Engineering Math).
5. I cannot do many of the homework problems that the students bring me. I received an A in differential equations and engineering math, but the students bring me problems that I cannot solve or that I have never seen before. If this happened only 2-3 times throughout the semester I would not be too concerned, because I am not an expert in the field of differential equations. But this happens with multiple problems on almost every problem set that I've seen.

For all of these reasons, I would recommend that Dr. Feldman not teach Math 217 in the Spring 2012 semester. The engineering students that are currently in that class are not adequately being prepared for Engineering Math or engineering classes that have a prerequisite of Math 217.