From: "Mark Feldman"

Date: Mon, October 3, 2011 10:37 am

To: Jay Johnson [and the members of the engineering curriculum committee]

Donald Getty, Rob Smith [and the four members of the Math Department’s Undergraduate Committee]

Re: Kay’s email

With regard to the referenced email from Prof. Kay, I wanted to let all of you on the SEAS Curriculum Committee know why I decided to use the MIT OCW material.

First, though, in order to provide you with some information about my teaching in general, I have attached three letters from former adult students. (I have a file of letters you are welcome to look at. Also, I have been fortunate enough to have taught several- courses to children of some of the faculty here. They all know me personally from that experience. I haven’t contacted them about this but please feel free to inquire about me from them. They are XXXX (Executive Vice Chancellor and XXXX) and, XXXX (Professor of Biochemistry and Molecular Biophysics) and XXXXX (Professor, Department of Medicine) Finally, XXXX’s son XXX took courses from me. He is a professor in the Math Department.

Now back to the MIT materials. Given my background (an MS in engineering from here and a work history at McDonnell Douglas, along with later collaboration there), I understand the fundamental importance of DifEq to engineers. I was already well aware of the MIT OCW, so, noting the excellence of WU engineering students, I decided to look at the MIT site. That is when I discovered the following:

Their math department has worked extensively with their engineering school to come up with a fist of skills for the engineers to acquire in the Dif Eq class. It appears to me that they have been develop.ing this course over a period of about ten years. Their approach to the material is the same as f normally use in my classes. (For example, they give a sound foundation and explanation for using the Complex Exponential (without being overly rigorous) . They don't just tell the students "take the real part". I do the same.) They present (recitation) questions to the students - which the TA

discusses with them. Some of these are highly integrated and demonstrate new ideas and important ways of applying the material. (In my case, of course, the "TA" has to be me.) Their HW problems are more integrated than those in standard texts. There are solutions online but many of these are just guides, impossible to understand if the student hasn't already worked on the problem. After realizing how outstanding the MIT resource is for students with the abilities of those here at WU, I could not imagine myself not utilizing it. Of course, integrating these materials, along with the book and my

lectures (accessible at http://www.math.wustf.edu/-mf/Math217Syllabus2011.htm, just click on the

individual lectures.), has been much more work than just using a text with my lectures. In fact, I spent a good deal of time fast Summer determining how best to utilize the MIT resource, integrating it with what I would normally do; and, keeping it manageable for both me and the students. I continue working on this.

I hope this answers any questions you might have about the course. It can always be improved and I would appreciate any suggestions that you have. Also, if you have questions, please let me know. I will be more than happy to answer them.

Mark Feldman, Ph. D.

Department of Mathematics

Washington University in St. Louis