

Online Teaching of Electrical Power Systems in Electrical Engineering; Experiences and Myths

Abstract- Online teaching is here to stay. The integration of technology into teaching can be a dangerous approach because of the different learning styles that our students have. We can not longer deny or refuse to teach online, therefore we must reinvent ourselves and develop skills that we did not have or did have and did not know it. This paper attempts to analyze the teaching of electrical power systems online in electrical engineering. More specifically, how we deal with the delivery of the material. We will show how effective the system, we have implemented, has been for the teaching of online classes, versus the classical classroom teaching. To do so we split one class in two sections; the first one is the online section and the second one is the classroom section. To reduce the duplication, while the online section is taking the class, we have a smart board with the computer screen on it and the classroom section is taking the lecture at the same time.

The time has arrived where all students have a laptop or have a PC at home. 90% of the students taking these classes own a laptop with wireless communication. It is very encouraging to see that the students in the in-classroom class have their own laptops connected to the online class so that they can minimize note taking and pay more attention to the lecture. The question is; how do I make sure that students outside of the classroom are connected to the online class? The answer is in the software that we use. Basically we have a list of students logged on the left side of the screen. Furthermore, there is an interactive aspect of our system via sound and video. I do prefer sound only so that those students that do not have access to a large broadband ISP, at least they can listen and talk without many interruptions or slowing down of their system.

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