Potential Electronic Design Self-Study Course

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EE students watch three video clips per week => https://electronics.foxping.com/.

Every student downloads Micro-Cap to their laptop => https://micro-cap.informer.com/download/.

The homework for students is to use Micro-Cap to create the electronic circuit example used in "every" video clip. Every student verifies that they get the same result as the video clip.

This is similar to a lab after "every" lecture! With Micro-Cap, students can easily modify the circuit to see how the output changes with each circuit change. This will increase their knowledge substantially!

Memorization is not needed as this knowledge will be embedded in their brain!!! This is self-study!!!

For exams, the instructor asks the students to construct a circuit. Every student constructs the circuit using Micro-Cap. Each student would give the instructor a pdf "print screen" which shows the circuit and the electronic input / output.

This could work for distance students too. The Proctor tells the student what the instructor wants designed. The student gives the Proctor the print screen which is given to the instructor.

A potential addition (valuable addition), part way through the course, every Junior is assigned a Sophomore student. That Junior teaches that Sophomore how to use Micro-Cap to create fundamental electronic circuits which display the electronic input / output.

Perhaps every Junior would be assigned a different Sophomore every week. A test, created by the Junior, indicates to the Junior how well the Sophomore learned!

Every Junior would need to thoroughly understand a topic in order to teach a Sophomore.

I believe that learning how to use Micro-Cap the first semester of the Junior year could lead those students to use Micro-Cap to understand the topics in the "other" courses until they graduate!

The above thoughts may seem a bit unusual, but the odds are increased that every student would be able to design electronic circuits immediately when they are hired!!!